

APPENDIX 1 Computer Programs

DEC 2 4 2002 TECH CENTER 1600/2900

BUILD FALSE

#!/usr/leo/bin/perl if (scalar @ARGV <4) { die "Need Pool, Seq, #False positives, #False negatives\n"; } \$FalsePos=\$ARGV[2]; \$FalseNeg=\$ARGV[3]; open(POOL,\$ARGV[0]); print "Using pool \$ARGV[0]\n"; \$pools=0; while(<POOL>) last if (/TotCost/); chop \$_; @Probes=split(/[:]/,\$_); shift @Probes; shift @Probes; shift @Probes; if (scalar @Probes > 0) { @{\$Pool[\$pools]}=@Probes; foreach \$probe (@Probes) \$PoolInd(\$probe)=\$pools; \$pools++; } } print "Using sequence \$ARGV[1]\n"; open(SEQ,\$ARGV[1]); \$Seq=""; while (<SEQ>) chop \$_; Seq = uc();} \$Found=0; undef(%Mers); undef(@Solutions); undef(%On); foreach \$i(0..length(\$Seq)-10)

```
$fprobe=substr($Seq,$i,5);
       $lprobe=substr($Seq,$i+5,5);
       $pool=$PoolInd{$lprobe};
       \Omega {\rm pool}=1;
foreach $prb (keys %On)
       foreach $pool (keys %{$On{$prb}})
              print "True Signal: fp=$prb pool=$pool\n";
              push @Signals, new signal($prb,$pool);
$NumOn=scalar @Signals;
@char = qw( A C G T );
foreach $1(@char) {
foreach $2(@char) {
foreach $3(@char) {
foreach $4(@char) {
foreach $5(@char) {
      push @Probes, $1.$2.$3.$4.$5;
}}}}
foreach $i (1..$FalsePos)
       $pool = int(rand($pools));
       fixed = Probes[rand(1024)];
       On{\frac{1}{2}} {0}
       print "False positive Signal: fp=$fixed pool=$pool\n";
foreach $i (0..$FalseNeg-1)
       $tmpSignal=$Signals[$i];
       \normalfont{$ \arrange} $ \arrange = $ i + int(\NumOn); 
       $Signal=$Signals[$randPos];
       $Signals[$i]=$Signal;
       $Signals[$randPos]=$tmpSignal;
       $On{$Signal->[0]} {$Signal->[1]}=0;
       print "False negative: fp=$Signal->[0] pool=$Signal->[1]\n";
       $NumOn--;
foreach $prb (keys %On)
       foreach $pool (keys %{$On{$prb}})
```

```
if (SOn{Sprb}{Spool}=1)
                    foreach $probeInPool (@{$Pool[$pool]})
                            $Mers{$prb.$probeInPool}=1;
             }
print STDERR "10mers:", scalar (keys %Mers),"\n";
print "10mers:", scalar (keys %Mers),"\n";
$overlap=2;
foreach $mer (keys %Mers)
       foreach $0 (1..$overlap)
             $Prefix[$0]{substr($mer,0,length($mer)-$overlap)}.=
                     substr($mer,length($mer)-$overlap,$o)." ";
             $Postfix[$0]{substr($mer,$overlap,length($mer)-$overlap)}.=
                    substr($mer,$0-1,$overlap+1-$0)." ";
       }
undef(%Pre);
undef(%Post);
foreach $mer (keys %Mers)
       $Pre{substr($mer,0,length($mer)-1)}.=substr($mer,length($mer)-1,1);
       $Post{substr($mer,1,length($mer)-1)}.=substr($mer,0,1);
undef(%Mers);
foreach $submer (keys %Post)
       @chars=split(//,$Pre{$submer});
       @Chars=split(//,$Post{$submer});
       foreach $ch (@chars)
             foreach $Ch (@Chars)
                     Mers{Ch.}submer.$ch}=1;
foreach $0 (1..$overlap)
       foreach $submer (keys %{$Postfix[$o]})
             @chars=split(//,$Prefix[$0]{$submer});
```

```
@Chars=split(//,$Postfix[$o]{$submer});
              foreach $ch (@chars)
                      foreach $Ch (@Chars)
                             Mers{Ch.}submer.$ch}=1;
              }
foreach $i (0..length($Seq)-11)
       mer = substr(Seq,Si,11);
       if (!$Mers {$mer})
              print STDERR $mer, " not found!\n";
              exit(1);
       }
}
print STDERR "11mers:", scalar (keys %Mers),"\n";
print "11mers:", scalar (keys %Mers),"\n";
foreach $lenMer (12..length($Seq))
{
       undef(%Prefix);
       undef(%Postfix);
       foreach $mer (keys %Mers)
       {
              $Prefix {substr($mer,0,length($mer)-1)}.=substr($mer,length($mer)-1,1);
              $Postfix {substr($mer,1,length($mer)-1)}.=substr($mer,0,1);
       undef(%Mers);
       foreach $submer (keys %Postfix)
              @chars=split(//,$Prefix {$submer});
              @Chars=split(//,$Postfix {$submer});
              foreach $ch (@chars)
                      foreach $Ch (@Chars)
                              $Mers {$Ch.$submer.$ch}=1;
       print STDERR $lenMer,"mers:", scalar (keys %Mers),"\n";
       print $lenMer,"mers:", scalar (keys %Mers),"\n";
       if ((\frac{1}{1} (\frac{1}{1} (\frac{1}{1} (\frac{1}{1} (\frac{1}{1} )) && (scalar (keys %Mers) > 4000))
```

```
print STDERR "Cleaning...";
              $Cleaned=0;
              foreach $seq (keys %Mers)
                     undef(%testOn);
                     foreach $i(0..length($seq)-10)
                            $fprobe=substr($seq,$i,5);
                            $pool=$PoolInd{substr($seq,$i+5,5)};
                            $testOn{$fprobe} {$pool}=1; #To see if all are fully
represented
                     $NumtestOn=0;
                     foreach $prb (keys %testOn) { $NumtestOn += scalar (keys
%{$testOn{$prb}}); }
                     if ($NumtestOn<($lenMer-15))
                            $Cleaned++;
                            delete $Mers {$seq};
              print STDERR "$Cleaned cleaned out.\n";
print STDERR "Checking all ",scalar (keys %Mers), " solutions for full dot-representation...";
print OUT "#Growths: ", scalar (keys %Mers)," ";
NEXT: foreach $seq (keys %Mers)
       undef(%testOn);
       foreach $i(0..length($seq)-10)
       {
              $fprobe=substr($seq,$i,5);
              $pool=$PoolInd{substr($seq,$i+5,5)};
              $testOn{$fprobe} {$pool}=1; #To see if all are fully represented
       $NumtestOn=0;
       foreach $prb (keys %testOn) { $NumtestOn += scalar (keys %{$testOn{$prb}}); }
       if ($seq eq $Seq)
              $Found=1;
              $seq .= " True solution ";
       if ($NumtestOn>=$NumOn)
              push @Solutions, $seq;
```

```
print "$seq DotsOn=$NumtestOn\n\n";
}

print STDERR "done.\n",scalar @Solutions, " consistent solutions found";
if ($Found)
{
    print STDERR " including the true one.";
}
else {
    print STDERR " - TRUE not FOUND!!";
}
print "Solutions: ",scalar @Solutions," ";

sub new_signal
{
    my ($fp,$pool)=@_;
    my @Signal = ($fp,$pool);
    return \@Signal;
}
```

BuildMMult

```
#!/usr/leo/bin/perl
if (scalar @ARGV <4) { die "Need Pool, Seq, #False positives, #False negatives\n"; }
$FalsePos=$ARGV[2];
$FalseNeg=$ARGV[3];
open(POOL,$ARGV[0]);
print "Using pool $ARGV[0]\n";
$pools=0;
while(<POOL>)
       last if (/TotCost/);
       chop $_;
       @Probes=split(/[: ]/,$_);
       shift @Probes;
       shift @Probes;
       shift @Probes;
       if (scalar @Probes > 0)
              @{$Pool[$pools]}=@Probes;
              foreach $probe (@Probes)
                    $PoolInd{$probe}=$pools;
              $pools++;
       }
}
print "Using sequence $ARGV[1]\n";
open(SEQ,$ARGV[1]);
$Seq="";
while (<SEQ>)
{
       chop $_;
       Seq = uc();
}
$Found=0;
undef(%Mers);
undef(@Solutions);
undef(%On);
foreach $i(0..length($Seq)-10)
       $fprobe=substr($Seq,$i,5);
       $lprobe=substr($Seq,$i+5,5);
```

```
$pool=$PoolInd{$lprobe};
      \Omega {\rm pool}=1;
foreach $prb (keys %On)
      foreach $pool (keys %{$On{$prb}})
             print "True Signal: fp=$prb pool=$pool\n";
             push @Signals, new signal($prb,$pool);
$NumOn=scalar @Signals;
@char = qw( A C G T );
foreach $1(@char) {
foreach $2(@char) {
foreach $3(@char) {
foreach $4(@char) {
foreach $5(@char) {
      push @Probes, $1.$2.$3.$4.$5;
}}}}
foreach $i (1..$FalsePos)
      pool = int(rand(pools));
      fixed = Probes[rand(1024)];
      \Omega_{\text{sined}} \
      print "False positive Signal: fp=$fixed pool=$pool\n";
foreach $i (0..$FalseNeg-1)
      $tmpSignal=$Signals[$i];
      $Signal=$Signals[$randPos];
      $Signals[$i]=$Signal;
      $Signals[$randPos]=$tmpSignal;
      On{Signal->[0]} {Signal->[1]}=0;
      print "False negative: fp=$Signal->[0] pool=$Signal->[1]\n";
      $NumOn--;
foreach $prb (keys %On)
      foreach $pool (keys %{$On{$prb}})
             if (SOn \{Sprb\} \{Spool\} == 1)
                    foreach $probeInPool (@{$Pool[$pool]})
```

```
$Mers{$prb.$probeInPool}=1;
              }
print STDERR "10mers:", scalar (keys %Mers),"\n";
print "10mers:", scalar (keys %Mers),"\n";
#$overlap=2;
#foreach $mer (keys %Mers)
#{
#
       foreach $0 (1..$overlap)
#
#
              $Prefix[$0]{substr($mer,0,length($mer)-$overlap)}.=
                     substr($mer,length($mer)-$overlap,$o)." ";
#
              $Postfix[$0]{substr($mer,$overlap,length($mer)-$overlap)}.=
#
#
                     substr($mer,$0-1,$overlap+1-$0)." ";
#
#}
undef(%Pre);
undef(%Post);
foreach $mer (keys %Mers)
       $Pre{substr($mer,0,length($mer)-1)}.=substr($mer,length($mer)-1,1);
       $Post{substr($mer,1,length($mer)-1)}.=substr($mer,0,1);
undef(%Mers);
foreach $submer (keys %Post)
       @chars=split(//,$Pre{$submer});
       @Chars=split(//,$Post{$submer});
       foreach $ch (@chars)
              foreach $Ch (@Chars)
                     Mers{Ch.}submer.$ch}=1;
#foreach $0 (1..$overlap)
#{
#
       foreach $submer (keys %{$Postfix[$o]})
#
       {
#
              @chars=split(//,$Prefix[$0]{$submer});
#
              @Chars=split(//,$Postfix[$0]{$submer});
#
              foreach $ch (@chars)
#
```

```
foreach $Ch (@Chars)
#
#
                            Mers{Ch.}submer.$ch}=1;
#
#
#
              }
#
       }
#}
foreach $i (0..length($Seq)-11)
       mer = substr(Seq,Si,11);
       if (!$Mers{$mer})
              print STDERR $mer, " not found!\n";
              exit(1);
}
print STDERR "11mers:", scalar (keys %Mers),"\n";
print "11mers:", scalar (keys %Mers),"\n";
foreach $lenMer (12..length($Seq))
       undef(%Prefix);
       undef(%Postfix);
       foreach $mer (keys %Mers)
              $Prefix {substr($mer,0,length($mer)-1)}.=substr($mer,length($mer)-1,1);
              $Postfix {substr($mer,1,length($mer)-1)}.=substr($mer,0,1);
       undef(%Mers);
       foreach $submer (keys %Postfix)
              @chars=split(//,$Prefix {$submer});
              @Chars=split(//,$Postfix {$submer});
              foreach $ch (@chars)
                     foreach $Ch (@Chars)
                            Mers{Ch.}submer.$ch}=1;
       print STDERR $lenMer,"mers:", scalar (keys %Mers),"\n";
       print $lenMer,"mers:", scalar (keys %Mers),"\n";
       if ((\frac{1}{1000}) = 0) && (scalar (keys %Mers) > 4000))
              print STDERR "Cleaning...";
              $Cleaned=0;
```

```
foreach $seq (keys %Mers)
                     undef(%testOn);
                     foreach $i(0..length($seq)-10)
                            $fprobe=substr($seq,$i,5);
                            $pool=$PoolInd{substr($seq,$i+5,5)};
                            $testOn{$fprobe} {$pool}=1; #To see if all are fully
represented
                     $NumtestOn=0;
                     foreach $prb (keys %testOn) { $NumtestOn += scalar (keys
%{$testOn{$prb}}); }
                     if ($NumtestOn<($lenMer-15))
                            $Cleaned++;
                            delete $Mers{$seq};
              print STDERR "$Cleaned cleaned out.\n";
print STDERR "Checking all ", scalar (keys %Mers), " solutions for full dot-representation...";
print OUT "#Growths: ", scalar (keys %Mers)," ";
NEXT: foreach $seq (keys %Mers)
       undef(%testOn);
       foreach $i(0..length($seq)-10)
       {
              $fprobe=substr($seq,$i,5);
              $pool=$PoolInd{substr($seq,$i+5,5)};
              $testOn{$fprobe} {$pool}=1; #To see if all are fully represented
       $NumtestOn=0;
       foreach $prb (keys %testOn) { $NumtestOn += scalar (keys %{$testOn{$prb}}); }
       if ($seq eq $Seq)
              $Found=1;
              $seq .= " True solution ";
       if ($NumtestOn>=$NumOn)
              push @Solutions, $seq;
              print "$seq DotsOn=$NumtestOn\n\n";
       }
}
```

```
print STDERR "done.\n",scalar @Solutions, " consistent solutions found";
if ($Found)
{
          print STDERR " including the true one.";
}
else {
          print STDERR " - TRUE not FOUND!!";
}
print "Solutions: ",scalar @Solutions," ";
sub new_signal
{
          my ($fp,$pool)=@_;
          my @Signal = ($fp,$pool);
          return \@Signal;
}
```

APPENDIX 2 Experimental Target Sequence r300 (SEQ ID NO:41)

GTAGGGGTAG	ACATCGCGTA	AAAGGGGCGT	ACCCAGGACC	CCCCTTGGCT
CAATAAGTAG	CGCTGGGGTG	CTACTACGGG	TCTCGACACG	CATTCAACTA
AAAGCTTCCA	TTCGCACGGG	CTTATTTAAC	GAAGGTCGCG	ATAAGGTGCC
GAATAGGCTG	CAGAGCGGCA	GCCTGTCCAG	TGAATGCTGT	GAGGCCTCCA
GCTGACTCAT	GAGAGAAGCC	CAGTATTCAA	ACTACGATTC	CACTCGACAA
TTTAGGATGT	CTTCCCGAAA	GCTATCGGGT	AGAATATCAG	ATTCGTTTAA

APPENDIX 3 D16 and DN16 Pools of Probes

D16

Group	0	:	64	:
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Group 0:64:					
GATTT AAGAT AGAAC TTGCT CTCTT AACAG TATGT TCTCC AGTTA GTTTG CTGCG	CAGCT CAAGC TCAAA GTAAG ATGAA TGGGG GGACT GCGGG ATACT CGTAG CGATA	GAAAA TAACG ACTAT GGTAC TCTGA GCACC AGCGA GTCGT CTTCC TTTAT ACGTG	TGGTT GCCTC TCAGT TTAGA ACCGC GTGGC TGATG CGCCG CCCAG AACCC AGGCA	AAAGT TGCAA GGGAA TAGTC TACAC GGCTG GATCA ATTGG GCCAT CCGAC	CGCTC CAATG TTCTA CCACA CCTTA GTCCA TCCCG GTATC TGTTC CAGGA
Group 1:64:					
GTAAA GGATG GAGGA GGCTC ATCTG CCAGA CCGCA TGACC AGGTA TGTGA	TCAGG CAACG TAATC TACGC TTTAG ACTTA AAACA TTGAT AAGCC GGTGC ATCCT	ACTCC AATGG CAAGT CGGGG CATAC GCACA ATGTC AGCAT CGAAT CGAAT CAGTT	ATTAC TATCG TGCTA TTATA CCCCT GCTTG TGGGT GTTCA CGGAC GCGGC CTTTT	CCTGT CTCAA ACCAA CTCGG GACAG TCCAC TCTTC CGTCA TCGTG CACTA	GCCCG TGCCG TAGAA CTACC AGAGA CTGGC ATAGT ACATT GGCGT GGTCT
Group 2:64:					
TAGGG TAATT TGCTG TTAAG CAGAG CCGTT ATGGG TTGTT ACCAT GAGGC GGGAT	GCGTC CTGAC GTCCG CCCGG TCCCT TCTGC AAGTG TGAAC CAACA AAACT TTGCA	GTTTC GGGCG TACCC CGCCT CCTAA CGATG CATGT GAAGG AATAC CTCTC ACGGA	AGATT CCAAT AGCAG GATAG GGAGA AGCGC GCATT GGCAA GACGT GCTCA AGTAA	TGTGT CTAGT GTTCT TACAA CCACC CGGTA CAGTC GACTA ATAAA CGTGC	TTCGA ATTCC ACTCG TCATA AGACC ACAGG CTTTG ACGAC GTAGC ATCTA
Group 3:64: ACGGT	CGGCA	ATACG	CCTTC	AACGC	CGCGC

CGACG GAACT CCTGG GTTGT GCAGC TTGCG ATTTG GTCGG CATCC CGATT	CGGGT TGTGC TAAGG TTAGC GAGAC GCTAT TCTCG GGTTA AGAGG CCGCT	GTGAA GCCCC TCCTC CACAG GGTAG TGGAT CTTTA AAGCG GAGTG TAGGA	AGCAA TTCTT ATCAC GCATA TGACA GATGG ATTGA ACTCA GTGTC TGGTG	CTAGA TGCCT CACTT AAATC AATAT ATGTT CTCCC TCCGT AAAAA	TCGTA TCAAG ACGAG CTAAT TATTC TACCA AGGCC AGCTG CCCAA
Group 4:64:					
TAAAT TTCGC CAGAA CTGGT CAATC GCCGT TTCCG GGATA TACTA TGAGC GCTTT	CGTAT AACGG AACCT GGGCT AGCTC CTACG TCGGG GTCCT CCCCA GGTCA TTATT	AAAAG TATGA GCGCA GAGTT GCAAC CTTAC GACAC ATAAC ATTTC GTAGG TGTTG	CAAGA ATCAA GAGGG AAGTA ATGGA GTTAG ACATG CCATT GGGAG AGTGG	ACGAT TCCAA AATGT CAGCC TAGCA CCTGC GGCGA CACTG CCGAG TCACC	GAACA CGCGT ATGCC TGTAC TCTCT CGTCG AGACT GATTC CATCT CGCCC
Group 5:64:					
GGGCC GTTAC ATAAG CTTCG TGGTA TGTAT AGATA TCATG CCGTC TGACT GGTGG	TCTAG AACAA CGCTT CTGGG ÇCCCG GCCGC GACCC CCAAC ATTTT AGTTC ACGCG	ACCGA TGCGC GCTCT AATCG CTATA TACCT TAGGT CTCAC GATTA GGAGT ATCCC	GAAAT CGGAA ACTGT CAGCA AGCGG TCGCC AAGGC GCGTG CATTC CCAGT	CATAG AACTT TCCAT TTCTG GAACG TAGAC ACACC GTACA CTGCT AGGAC	CCTGA TAAAA ATGAT GCTAA CACGG GTGTT TTATC GACGA CGAGC GTCAG

Group 6:64:

CCAGC

ACAAA

L					
AAGGG TCGTC CGGCG CTCGC TTGAA ATTGT TATTA CCGGT CGAAC GACTT	CATAT CAGAC AGGAG GCGCG ATAGA TATGC CATGG TCGAT GCATC GATCC CTTTC	GCCTA CCAAG AACGA TACCG TTAGG AACTC CGTGT ATTCG GCTGA GTTGG CTGTT	GAAAC CGCAA GGCCC AGCAC TAAAG ACCAG GTCAT GGACA GTGAG TTCCA TGGGC	TGATT CAATA CTACT TGTAA ACTAA TAGCT AGTTT GGGTA CCTCA CGGGA	ACAGC CTCTG ACGCC TGCGT TTTAC AGATG AAAAT GAGGT TCACT ACCCT
Group 7:64:					
TCCGG GTCTC CGTTC AACTG ACCCC GATAC CCGTG ATGTA ATGAT CGGAT GCGCT	CGGGC CAATT TGGCA ACTTT ATAGG CTCGT GTATA TCTAC TTGCC TTATG TTGGA	AAAAC AGTGT AGTAG ACGGC CTTAG CATTA GATTG CAGCG ATTCT TATCT CCAGG	GGAAG GCAGT TTAAT CTAAC TACAG TGAGA GGTGA TCACA GTACC AGCCA CCTCC	GACAA GGCCG CGACT CGTAA TCGGT AGACG TAGTT TAAGC TCCTA ACATA	TGCAC GCGAA CTTCA GACCT CACGC GTGGG GGGTC AAGGA TGTTT TCGAG
Group 8:64:					
TTTTC AGTCC AAAGA CTACA GTCTT CACCC CCGAA AGGTG TCGGA GCATG	GCCCA TGTCG CGTTA TATAA ATTAT AACCG GTTCG TCCTT CCCTA AGAAG	ATATC TCACG CACAT GCGAC TAATG AATAG ACGCT ATCGT TAGCC CGCAG	GGAAA ACCAC CCTCT GGGGG AGGAT CGGCT CCGCG TTCAA TGCCA CAAGG	GTTGA CGATC GATGC CTCGA AATCA GAGAG GGTTT ACTTG TTGGG TGGAC	CAGTA TGAAT CTAAG GGCGC TCTGT GTGTA AAATT ATGGC TATTT GAGCT

GCCGG

GTACT

Group 9:64:

TAGTA ATACA	TATCC CACAA	GTAAC AGGAA	ACGTT ATAGC	TTTAA TTACT	CTTGT CACCT
CATCG CCCTT	TTCGT GCCGA	GCTTA AATTT	AACCA AGTCT	CGCTG GCGCC	TAGAG TCGCA
ATAAT	TAAAC	CTGTA	CGACC	TACGG TGGTC	GGCGG
CCGGC ATCTC	GATAT AGGGC	CAGGT GAATG	CCAAA TGTCA	GTGAT	GGCCT
TTGGC GCCAC	ATGCG ACTAC	ACTGA TCTGG	TCATT ACCCG	GAAGT CGTAC	GGGTT CTCAG
AAAGG GCTAG	CATGA GGACG	TTTTG TGAGG	GACTC GTGGA	GTTGC	TGCAT

Group 10:64:

CCACG	GCAGA	AACGT	GAGAT	GGGCA	CGTTG
CCGTA	TGATA	GCCTG	TCCGA	AAGCA	GAATA
ATTCA	CGAGG	TGGGA	GGCTT	TGAAG	TGTCC
CCCTC	GCTGT	TAACT	ATCAG	TTCCT	CTCTA
TTACC	GGAAC	TCGCG	GTTAA	ATGAC	GATCG
GCAAT	GTGCT	ACTAG	AGGGT	AGCCG	CGCCA
TTTGG	ATGTG	CTGCC	TCTTT	CATGC	AAATG
TCTCA	ACACA	AGTGA	AGTAT	GTCAC	ACATC
GACGC	GGTTC	ACCTT	TACTG	CTGGA	GACCA
AGAGC	ACGGG	CAAAA	GTACG	CGCAT	TCGAC
TATAT	CTATT	GAGTC	CCTAC		

Group 11:64:

GAACC	AGCCT	AACAT	CACGT	GGGGC	CTCCA
GCTCG	ACAAG	GTCTG	GGCTA	TGTAG	ATATT
TCGTT	CCACT	ACCTA	CTTAT	CGCAC	TAATA
TGGCG	TTCGG	TACTC	TTGTC	AGGTC	TCCCA
CCTTT	GTTCC	ATTTA	GCGGA	GGAAT	TTTCT
CAAAC	ATCGC	GAGCG	CTTGA	TCAAC	TTCAT
TGATC	AGAGT	ACCGG	CGAGA	GCTTC	CAGTG
TTAAA	TACGA	CCGCC	AAAGC	AGACA	GGTAA
CGTGG	GCCAG	CGGTT	GATGT	GCAGG	AATTG
TAGAT	AAGAA	CATCA	ATGCA	CTGAG	ATGGT
GTGAC	ACTGC	AGTAC	CTATG		

Group 12:64:

TGCTT	GAGCA	ATATG	TTACA	GGATC	ACACG
CTCAT	CTGTC	AGAAT	TATTG	CTGCA	GCAAA
ATTAA	TACGT	GCCCT	AAGAC	ACCCA	GTCTA
CTAAA	AGTCG	ACCTC	CGCGA	GGTAT	CGAGT
CCTAG	GTCCC	TTCAC	GTGCG	TGGCC	TCGCT
TTGAG	TCAAT	GATGA	AGCTA	GGCAC	CTTCT
GCGGT	ACGAA	ATCGG	CCGGG	TGGAA	TGTGG
CGTTT	AGGCT	GAAAG	GAAGC	ATAAA	GGGTG
CACCG	TCAGC	CCATG	GCTCC	CTTGC	CACTC
AATCC	TCCAG	AAGTT	CATAA	CAACC	TCTTA
TGACG	CGGAG	GTAGT	ACAGA		

Group 13:64:

TTTGT	ATTAG	TAAGA	TCGAA	CGACA	ACTTC
AGAAA	GTAGA	AAGTC	CCTAT	GCGTA	CGTCC
ACCGT	TCTTG	GAATT	TCCCC	ATCCG	GCTGC
GTCAA	GATAA	GGTCG	TTCTC	TGGCT	AGGGG
GGGAC	CCATC	GTGGT	GTTTT	AACTA	TCGGC
AAACC	GGCCA	TGAGT	AATGA	CTCCT	GTGCC
CAGGC	TATAC	GACGG	AGGTT	AGCCC	TACAT
CAGAT	GCACG	GTGTG	GGCAT	CGCGG	TTTCA
CCCGA	AATCT	TGCAG	CTGAA	CGGTG	ACACT
CCCAC	TAGCG	CTAGG	CAAAG	TTAAC	ATTGC
GGAGC	ACCTG	TGTTA	ACGCA		

Group 14:64:

CGGTC	GCTGG	GTCGC	TTTCC	TTGTA	CACAC
GCGTT	ACAAC	CGTCT	ACTCT	CGAAA	AGTTG
CTTGG	AGCTT	ACGTA	AGTGC	TGGAG	AGTCA
CTCCG	TTAGT	GTAAT	TTACG	GGGGA	ACAGT
TCATC	ATCGA	CCCAT	CCCGC	GCAAG	TGCCC
TTCAG	GAAGA	AAACG	TAACA	CAAAT	ATGAG
AATAA	ATATA	TGCGA	GGCAG	GCTAC	CTATC
CCGGA	CACCA	GAGAA	TTTTT	CAGGG	GATCT
TACTT	GGTGT	CATTG	GGACC	GACTG	ATGCT
GAGCC	TATGG	TCCTG	TAGGC	AAGGT	AATTC
GTTTA	CTGAT	GGATT	TCTAA		

Group 15:64:

AATTA	TAGTG	TATAG	GGGGT	GGTCC	TGAAA
CTTAA	AAGCT	CCCTG	CTGTG	GCCTT	CGAAG
CCTCG	TATCA	TAACC	TTGGT	CATTT	CCATA
TAAGT	CGTGA	AGGGA	GTCGA	GGTTG	AGATC
TGTCT	ATCTT	GACAT	TCAGA	GGAGG	AAGAG
AGGCG	GTTAT	TGCGG	CCCGT	TTTCG	CACGA
GAATC	ATACC	CAACT	GCACT	TTGAC	ACTGG
GCCAA	CCGAT	TGCTC	GTGCA	GCGAG	GACCG
GAGTA	ATTTT	AGCGT	CGCTA	TCCGC	TCTAT
CGGCC	CTAGC	GTATG	ATCCA	AACAC	ACAAT
TTTGC	CCCCC	ACGTC	AATGC		

DN16

Group 0:64:

GGGAT

TTGCA

CCTTT CAAGC TCAAA GTAAG AACTT TGGGG GGACT GCGGG ATACT CGTAG CGATA	GAAAA TAACG ACTAT GGTAC TCTGA GCACC AGCGA GTCGT CTTCC CATGG ACGTG	TGGTT GCCTC TCAGT TTAGA ACCGC GTGGC TGATG CGCCG CCCAG AACCC AGGCA	AAAGT TGCAA GGGAA TAGTC TACAC GGCTG GATCA ATTGG CTTAT CCGAC	CGCTC CAATG TTCTA CCACA GACGA GTCCA TCCCG GTATC TTGAG CAGGA
TCAGG CAACG TAATC TACGC TTTAG ACTTA AAACA TTGAT ATTGT GGTGC ATCCT	ACTCC AATGG CAAGT CGGGG CATAC GCACA ATGTC AGCAT CGAAT CAGTT GCGAT	AAAGC TATCG TGCTA TTATA CCCCT GCTTG TGGGT GTTCA CGGAC GCGGC CTTTT	CCTGT CTCAA ACCAA CTCGG GACAG TCCAC TCTTC CGTCA TCGTG CACTA	GCCCG TGCCG TAGAA CTACC AGAGA CTGGC ACCTT ACGAG GGCGT GGTCT
GCGTC AGGTG GTCCG CCCGG TCCCT TCTGC ATGAT TGAAC CAACA AAACT	GTTTC GGGCG TACCC CGCCT CCTAA CGATG CATGT TTTAC AATAC CTCTC	TTGGC CCAAT AGCAG GATAG GGAGA AGCGC GCATT GGCAA GACGT GCTCA	CCCCA CTAGT GTTCT TACAA CCACC CGGTA CAGTC GACTA ATAAA CGTGC	TTCGA ATTCC ACTCG TCATA AGACC ACAGG CTTTG ACGAC GTAGC ATCTA
	CAAGC TCAAA GTAAG AACTT TGGGG GGACT GCGGG ATACT CGTAG CGATA TCAGG CAACG TAATC TACGC TTTAG ACTTA AAACA TTGAT ATTGT GGTGC ATCCT GCGTC AGGTG GTCCG CCCGG TCCCT TCTGC ATGAT TGAAC	CAAGC TAACG TCAAA ACTAT GTAAG GGTAC AACTT TCTGA TGGGG GCACC GGACT AGCGA GCGGG GTCGT ATACT CTTCC CGTAG CATGG CGATA ACGTG TCAGG ACTCC CAACG AATGG TAATC CAAGT TACGC CGGGG TTTAG CATAC ACTTA GCACA AAACA ATGTC TTGAT AGCAT ATTGT CGAAT GGTGC CAGTT ATCCT GCGAT ATCCT GCGAT GCGTC GTCCC CCCGG CGCCT TCCCT CCTAA TCTGC CGATG ATGAT CATGT TCTGC CGATG ATGAT CATGT TCAGC CGATG ATGAT CATGT TGAAC TTTAC CAACA AATAC	CAAGC TAACG GCCTC TCAAA ACTAT TCAGT GTAAG GGTAC TTAGA AACTT TCTGA ACCGC TGGGG GCACC GTGGC GGACT AGCGA TGATG GCGGG GTCGT CGCCG ATACT CTTCC CCCAG CGTAG CATGG AACCC CGATA ACGTG AGCA TCAGG ACTCC AAAGC CGATA ACGTG TGCTA TACGC CGGGG TTATA TTAG CATAC CCCCT ACTTA GCACA GCTTG AAACA ATGTC TGGGT AAACA ATGTC TGGGT ATTGT CGAAT CGGAC GGTGC CAGTT GCGAC GGTGC CAGTT GCGAC GCTCC AGCAT CTTCTA ATTCT CGAAT CGGAC CCCGG CGCCT GATAG TCCCT CCTAA GGAGA TCCCT CCTAA GGAGA TCCCT CCTAA GGAGA TCCCT CCTAA GGAGA TCTGC CGATG AGCGC ATGAT CATGT GCACT TTGAT CGAAT CTTTT	CAAGC TAACG GCCTC TGCAA TCAAA ACTAT TCAGT GGGAA GTAAG GGTAC TTAGA TAGTC AACTT TCTGA ACCGC TACAC TGGGG GCACC GTGGC GGCTG GGACT AGCGA TGATG GATCA GCGGG GTCGT CGCCG ATTGG ATACT CTTCC CCCAG CTTAT CGTAG CATGG AACCC CCGAC CGATA ACGTG AACCC CCGAC CGATA ACGTG TATAC CTAGG ACTCC AAAGC CCTAT TACGC CGGGG TTATA CTCGG TAACC CAAGT TGCTA ACCAA TACGC CGGGG TTATA CTCGG TTTAG CATAC CCCCT GACAG ACTTA GCACA GCTTG TCCAC AAACA ATGTC TGGGT TCTTC TTGAT AGCAT GTTCA CGTCA ATTGT CGAAT CGGC CACTA ATTGT CGAAT CGGC CACTA ATTGT CGAAT CTCGG GTGC CAGTT GCGC CACTA ATCCT GCGAT CTTTT GCGTC GTTC TTGCC CCCCA AGCG GGCC CACTA TCCCC AGCAG GTTCT CCCGG CGCCT GATAG TACAA TCCCT CCTAA GGAGA CCACC CCCCGG CGCCT GATAG TACAA TCCCT CCTAA GGAGA CCACC CTGCC CGATG AGCGC CGGTA ATGAT CATGT GCGC CGGTA ATGAT CATGT GCACT CAGTC CCCGG CGCCT GATAG TACAA TCCCT CCTAA GGAGA CCACC CTGCC CGATG AGCGC CGGTA ATGAT CATGT GCATT CAGTC TGAAC TTTAC GGCAA GACTA CAACA AATAC GACGT ATAAA

ACGGA AGTAA

Group 3	:	6	4	:
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O104p 3.01.					
ACGGT CGACG GAACT CCTGG GTTGT GCAGC TTGCG ATTTG GTCGG CATCC CGATT	CGGCA CGGGT TGTGC TAAGG TTAGC GAGAC GCTAT TCTCG GGTTA AGAGG AGTAC	ATACG GTGAA GCCCC TCCTC CACAG GGTAG TGGAT CTTTA AAGCG GAGTG TAGGA	CCTTC AGCAA TTCTT ATCAC GCATA TGACA GATGG ATTGA GGGCT GTGTC	AACGC CTAGA TGCCT CACTT AAATC AATAT ATGTT CTCCC TCCGT AAAAA	CGCGC TCGTA TCAAG ACATT CTAAT TATTC TACCA AGGCC AGCTG CCCAA
Group 4:64:					
TAAAT TTCGC CAGAA CTGGT CAATC GCCGT TTCCG GGATA CGCTA TGAGC GCTTT	CGTAT AACGG AACCT ACTCA AGCTC CTACG TCGGG GTCCT CTTGA GGTCA	AAAAG TATGA GCGCA GAGTT GCAAC CTTAC GACAC ATAAC ATTTC GTAGG TGTTG	CAAGA ATCAA GAGGG AAGTA ATGGA GTTAG ACATG CCATT GGGAG AGTGG	ACGAT TCCAA AATGT CAGCC TAGCA CCTGC GGCGA CACTG CCGAG TCACC	GAACA CGCGT ATGCC TGTAC TCTCT CGTCG AGACT GATTC CATCT CGCCC
Group 5:64:					
GGGCC GTTAC ATAAG CTTCG TGGTA TGTAT AGATA TCATG CCGTC TGACT GGTGG	TCTAG AACAA CGCTT CTGGG CCCCG GCCGC GACCC CCAAC ATTTT AGTTC GATCT	ACCGA TGCGC ACGCA AATCG CTATA TACCT TAGGT GTCGA GATTA GGAGT ATCCC	GAAAT CGGAA ACTGT CAGCA AGCGG TACTA AAGGC GCGTG CATTC CCAGT TTTGA	CATAG ATGAA TCCAT TTCTG GAACG TAGAC ACACC GTACA CTGCT AGGAC	CCTCC TAAAA AAGTG GCTAA CACGG GTGTT TTATC CCTTA CGAGC GTCAG

Group 6:64	Group	6:	64	:
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GCATG

CCAGC

AGAAG

ACAAA

G10ap 0.01.					
AGGCT TCGTC CGGCG CTCGC TTGAA AAGCC TATTA CCGGT CGAAC AGGAG CCTTG	CATAT CAGAC GCCAG GCGCG ATAGA TATGC TTTAT TCGAT GCATC GATCC CTTTC	GCCTA CCAAG AACGA TACCG TTAGG TGTCG CGTGT ATTCG GCTGA GTTGG CTGTT	GAAAC CGCAA GGCCC AGCAC TAAAG CCCCC GTCAT GGACA GTGAG TTCCA TGGGC	TGATT CAATA CTACT TGTAA ACTAA TAGCT AGTTT GGGTA CCTCA CGGGA	ACAGC CTCTG ACTTC TGCGT GAAGG AGATG AAAAT GAGGT TCACT ACCCT
Group 7:64:					
TCCGG GTCTC CGTTC AACTG ACCCC GATAC CCGTG ATGTA ATCAT CGGAT GCGCT	CGGGC CAATT TGGCA ACTTT ATAGG CTCGT GTATA TCTAC TTGCC TTATG TTGGA	AAAAC AGTGT AGTAG ACGGC CTTAG CATTA GATTG CAGCG ATTCT TATCT CCAGG	GGAAG GCAGT TTAAT CTAAC TACAG TGAGA GGTGA TCACA GTACC CCTGA AGCCA	GACAA GGCCG CGACT CGTAA TCGGT AGACG TAGTT TAAGC TCCTA ACATA	TGCAC GCGAA CTTCA GACCT CACGC GTGGG GGGTC AAGGA TGTTT TCGAG
Group 8:64:					
TTTTC AGTCC AAAGA CTACA GTCTT CACCC CCGAA AACTC TCGGA	GCCCA CTGAC CGTTA TATAA ATTAT AACCG GTTCG TCCTT CCCTA	ATATC TCACG CACAT GCGAC TAATG AATAG ACGCT ATCGT TAGCC	GGAAA ACCAC CCTCT GGGGG AGGAT CGGCT CCGCG TTCAA TGCCA	GTTGA CGATC GATGC CTCGA AATCA GAGAG GGTTT ACTTG TTGGG	CAGTA TGAAT CTAAG GGCGC TCTGT GTGTA AAATT ATGGC TATTT

CGCAG

GCCGG

CAAGG

GTACT

GAGCT

TGGAC

Group 9:64:

TAGTA	TATCC	GTAAC	ACGTT	TTTAA	CTTGT
ATACA	CACAA	AGGAA	ATAGC	TTACT	CACCT
CATCG	TTCGT	GCTTA	AACCA	CGCTG	TAGAG
CCCTT	GCCGA	TTTAA	AGTCT	GCGCC	TCGCA
ATAAT	TAAAC	CTGTA	CGACC	TACGG	GGCGG
CCGGC	GATAT	CAGGT	CCAAA	TGGTC	TTCCC
ATCTC	AGGGC	GAATG	TGTCA	GTGAT	GGCCT
AGATT	ATGCG	ACTGA	TCATT	GAAGT	GGGTT
GCCAC	ACTAC	TCTGG	ACCCG	CGTAC	CTCAG
AAAGG	CATGA	TTTTG	GACTC	GTTGC	TGCAT
GCTAG	GGACG	TGAGG	GTGGA		

Group 10:64:

	CCACG	GCAGA	AACGT	GAGAT	GGGCA	CGTTG
	CCGTA	TGATA	GCCTG	TCCGA	AAGCA	GAATA
	ATTCA	CGAGG	TGGGA	GGCTT	TGAAG	TGTCC
	CCGCT	GCTGT	TAACT	ATCAG	TTCCT	CTCTA
	TTACC	GGAAC	TCGCG	GTTAA	ATGAC	GATCG
	GCAAT	GTGCT	ACTAG	AGGGT	AGCCG	CGCCA
	TTTGG	ATGTG	CTGCC	TCTTT	CATGC	AAATG
•	TCTCA	ACACA	AGTGA	AGTAT	GTCAC	ACATC
	GACGC	GGTTC	ATAGT	TACTG	CTGGA	GACCA
	AGAGC	ACGGG	CAAAA	GTACG	CGCAT	TCGAC
	TATAT	CTATT	GAGTC	CCTAC		

Group 11:64:

GAACC	AGCCT	AACAT	CACGT	GGGGC	CTCCA
GCTCG	ACAAG	GTCTG	GGCTA	TGTAG	ATATT
TCGTT	CCACT	GCCAT	ACCTA	CGCAC	TAATA
TGGCG	TTCGG	TACTC	TTGTC	AGGTC	TCCCA
CAGCT	GTTCC	ATTTA	GCGGA	GGAAT	TTTCT
CAAAC	ATCGC	GAGCG	TGTGT	TCAAC	TTCAT
TGATC	AGAGT	ACCGG	CGAGA	GCTTC	CAGTG
AAATT	TACGA	CCGCC	ATTAC	AGACA	GGTAA
CGTGG	GACTT	CGGTT	GATGT	GCAGG	AATTG
TAGAT	AAGAA	CATCA	ATGCA	CCCTC	ATGGT
GTGAC	ACTGC	CTGAG	CTATG		

Group 12:64:

TGCTT	GAGCA	ATATG	TTACA	GGATC	ACACG
CTCAT	CTGTC	AGAAT	TATTG	TTTTT	GCAAA
ATTAA	TACGT	GCCCT	AAGAC	ACCCA	GTCTA
CTAAA	AGTCG	ACCTC	CGCGA	GGTAT	CGAGT
CCTAG	GTCCC	TTCAC	GTGCG	TGGCC	TCGCT
TGTTC	TCAAT	GATGA	AGCTA	GGCAC	CTTCT
GCGGT	ACGAA	ATCGG	CCGGG	TGGAA	TGTGG
CGTTT	AAGGG	GAAAG	GAAGC	AAATA	GGGTG
CACCG	TCAGC	CCATG	GCTCC	CTTGC	CACTC
AATCC	TCCAG	AAGTT	CATAA	CAACC	TCTTA
TGACG	CGGAG	GTAGT	ACAGA		

Group 13:64:

TTTGT	ATTAG	TAAGA	TCGAA	CGACA	ACGCC
AGAAA	GTAGA	AAGTC	CCTAT	GCGTA	CGTCC
ACCGT	TCTTG	GAATT	TCCCC	ATCCG	GCTGC
GTCAA	GATAA	GGTCG	TTCTC	TGGCT	AGGGG
GGGAC	CCATC	GTGGT	GTTTT	AACTA	TCGGC
AAACC	GGCCA	TGAGT	AATGA	CTCCT	GTGCC
CAGGC	TATAC	GACGG	AGGTT	AGCCC	TACAT
CAGAT	GCACG	GTGTG	GGCAT	CGCGG	TTTCA
CCCGA	AATCT	TGCAG	CTGAA	CGGTG	ACACT
CCCAC	TAGCG	CTAGG	CAAAG	TTAAC	ATTGC
GGAGC	ACCTG	TGTTA	GCTCT		

Group 14:64:

CGGTC	GCTGG	GTCGC	TTTCC	TTGTA	CACAC
GCGTT	ACAAC	CGTCT	ACTCT	CGAAA	AGTTG
CTTGG	AGCTT	ACGTA	AGTGC	TGGAG	AGTCA
CTCCG	TTAGT	GTAAT	TTACG	ACGCG	ACAGT
TCATC	ATCGA	CCCAT	CCCGC	GCAAG	TGCCC
TTCAG	GAAGA	AAACG	TAACA	CAAAT	ATGAG
AATAA	ATATA	TGCGA	GGCAG	GCTAC	CTATC
CCGGA	CACCA	GAGAA	CTGCA	CAGGG	GGGGA
TACTT	GGTGT	CATTG	GGACC	GACTG	ATGCT
GAGCC	TATGG	TCCTG	TAGGC	AAGGT	AATTC
GTTTA	CTGAT	GGATT	TCTAA		

Group 15:64:

AATTA	TAGTG	TATAG	GGGGT	GGTCC	TGAAA
CTTAA	AAGCT	CCCTG	CTGTG	GCCTT	CGAAG
CCTCG	ATGGG	TAACC	TTGGT	CATTT	CCATA
TAAGT	CGTGA	AGGGA	CTCAC	GGTTG	AGATC
TGTCT	ATCTT	GACAT	TCAGA	GGAGG	AAGAG
AGGCG	GTTAT	TGCGG	CCCGT	TTTCG	CACGA
GAATC	ATACC	CAACT	GCACT	TTGAC	ACTGG
GCCAA	CCGAT	TGCTC	GTGCA	GCGAG	GACCG
GAGTA	TCGCC	AGCGT	ATTTT	TCCGC	TCTAT
CGGCC	CTAGC	GTATG	ATCCA	AACAC	ACAAT
TTTGC	ACCAG	ACGTC	AATGC		

APPENDIX 4 Simulation Results

r300.0.0.out

Using pool D16 Using sequence r300

```
True Signal: fp=CTCGA pool=7
True Signal: fp=CTACG pool=1
True Signal: fp=CTACG pool=2
True Signal: fp=GTACC pool=0
True Signal: fp=ATCGC pool=1
True Signal: fp=GAATG pool=15
True Signal: fp=ATCGG pool=13
True Signal: fp=GTCGC pool=13
True Signal: fp=ACCCA pool=14
True Signal: fp=CTGGG pool=10
True Signal: fp=CAATT pool=3
True Signal: fp=GACAA pool=1
True Signal: fp=TACTA pool=3
True Signal: fp=ACCCC pool=6
True Signal: fp=AGACA pool=10
True Signal: fp=TTCCA pool=8
True Signal: fp=TTCCA pool=4
True Signal: fp=ACGCA pool=8
True Signal: fp=GACAC pool=2
True Signal: fp=CGACA pool=10
True Signal: fp=CGACA pool=11
True Signal: fp=CTACT pool=10
True Signal: fp=CCCCC pool=9
True Signal: fp=CCCCC pool=14
True Signal: fp=TTCCC pool=12
True Signal: fp=GCCCA pool=1
True Signal: fp=GAGAA pool=8
True Signal: fp=CCAGC pool=5
True Signal: fp=CAGAG pool=3
True Signal: fp=GCAGA pool=1
True Signal: fp=GCAGC pool=12
True Signal: fp=CGCGA pool=3
True Signal: fp=AGCGC pool=0
True Signal: fp=GGACC pool=1
True Signal: fp=CCAGG pool=7
True Signal: fp=TTAGG pool=1
True Signal: fp=GAGAG pool=1
True Signal: fp=TAAAA pool=11
True Signal: fp=AGCGG pool=4
True Signal: fp≈ACTAA pool≈15
True Signal: fp=CGGGC pool=4
True Signal: fp=ACTAC pool=4
True Signal: fp=ACTAC pool=7
True Signal: fp=AGGGG pool=9
```

```
True Signal: fp=AGGGG pool=5
True Signal: fp=TTTAA pool=15
True Signal: fp=GGGGC pool=7
True Signal: fp=CAGAT pool=11
True Signal: fp=CATGA pool=14
True Signal: fp=AATGC pool=1
True Signal: fp=CCCCT pool=13
True Signal: fp=GACAT pool=4
True Signal: fp=TCTTC pool=8
True Signal: fp=CCAGT pool=10
True Signal: fp=CCAGT pool=9
True Signal: fp=GCTAC pool=9
True Signal: fp=TTTAG pool=11
True Signal: fp=TGAGA pool=12
True Signal: fp=TGCCG pool=8
True Signal: fp=GCGCT pool=15
True Signal: fp=CGCGT pool=4
True Signal: fp=TGAGG pool=7
True Signal: fp=TCGGG pool=1
True Signal: fp=CGGGT pool=8
True Signal: fp=CGGGT pool=12
True Signal: fp=GGCGT pool=12
True Signal: fp=TATCA pool=4
True Signal: fp=ATATC pool=2
True Signal: fp=CTATC pool=6
True Signal: fp=GGGGT pool=11
True Signal: fp=GGGGT pool=14
True Signal: fp=TATCG pool=3
True Signal: fp=GCTAT pool=3
True Signal: fp=GATGT pool=0
True Signal: fp=TGGCT pool=6
True Signal: fp=CTCAA pool=15
True Signal: fp=ATCAG pool=6
True Signal: fp=CGATA pool=8
True Signal: fp=CTGAC pool=5
True Signal: fp=GTATT pool=11
True Signal: fp=ATGAG pool=8
True Signal: fp=GCCTC pool=0
True Signal: fp=GTGAA pool=2
True Signal: fp=GCGTA pool=0
True Signal: fp=GCGTA pool=9
True Signal: fp=GCCTG pool=12
True Signal: fp=GGATG pool=1
True Signal: fp=GTGAG pool=0
True Signal: fp=TTAAC pool=2
True Signal: fp=AAAGC pool=1
True Signal: fp=AAAGC pool=6
True Signal: fp=AAGCC pool=8
True Signal: fp=CTCAT pool=8
True Signal: fp=AGATT pool=12
True Signal: fp=CAGCC pool=10
True Signal: fp=CGCAC pool=4
```

```
True Signal: fp=AAAGG pool=1
True Signal: fp=GACCC pool=9
True Signal: fp=CCCTT pool=1
True Signal: fp=CGATT pool=11
True Signal: fp=GAAGC pool=5
True Signal: fp=TCATG pool=1
True Signal: fp=AGGAC pool=15
True Signal: fp=TGCTA pool=4
True Signal: fp=GAAGG pool=10
True Signal: fp=AATAA pool=2
True Signal: fp=TGCTG pool=9
True Signal: fp=GGCAG pool=1
True Signal: fp=GAGCG pool=3
True Signal: fp=CTTGG pool=1
True Signal: fp=ACAAT pool=6
True Signal: fp=ACTCA pool=7
True Signal: fp=TCCAC pool=10
True Signal: fp=AATAG pool=13
True Signal: fp=GATAA pool=1
True Signal: fp=TACGA pool=6
True Signal: fp=TATTC pool=2
True Signal: fp=CCTCC pool=3
True Signal: fp=TAACG pool=14
True Signal: fp=AAGCT pool=12
True Signal: fp=AAGCT pool=5
True Signal: fp=ACTCG pool=15
True Signal: fp=CAGCT pool=9
True Signal: fp=TCCAG pool=8
True Signal: fp=TCCAG pool=2
True Signal: fp=CGCAT pool=11
True Signal: fp=TCGAC pool=9
True Signal: fp=TCGAC pool=13
True Signal: fp=GCTCA pool=5
True Signal: fp=AGGAT pool=8
True Signal: fp=TAGGA pool=15
True Signal: fp=AGTGA pool=14
True Signal: fp=TAGGC pool=13
True Signal: fp=TACGG pool=7
True Signal: fp=TAGGG pool=13
True Signal: fp=AATAT pool=13
True Signal: fp=GGTGC pool=1
True Signal: fp=GGTGC pool=4
True Signal: fp=TCCAT pool=9
True Signal: fp=TGAAT pool=10
True Signal: fp=TATTT pool=6
True Signal: fp=TGTCC pool=10
True Signal: fp=AACTA pool=11
True Signal: fp=AACTA pool=3
True Signal: fp=CACTC pool=7
True Signal: fp=CTCCA pool=6
True Signal: fp=AAGTA pool=7
True Signal: fp=CAGTA pool=8
```

```
True Signal: fp=GACTC pool=14
True Signal: fp=GTCCA pool=3
True Signal: fp=CTGCA pool=11
True Signal: fp=ATAGG pool=12
True Signal: fp=GTAGA pool=8
True Signal: fp=GTAGA pool=9
True Signal: fp=TGTCT pool=0
True Signal: fp=CAGTG pool=15
True Signal: fp=GTAGC pool=14
True Signal: fp=GTGCC pool=10
True Signal: fp=CAAAC pool=11
True Signal: fp=GTAGG pool=3
True Signal: fp=AAAAG pool=0
True Signal: fp=AAAAG pool=2
True Signal: fp=ACACG pool=5
True Signal: fp=GAAAG pool=14
True Signal: fp=CCCGA pool=15
True Signal: fp=AGCCC pool=10
True Signal: fp=AGAGA pool=13
True Signal: fp=ATGCT pool=6
True Signal: fp=AGAGC pool=14
True Signal: fp=GCTTA pool=9
True Signal: fp=AGGCC pool=12
True Signal: fp=CGGCA pool=10
True Signal: fp=GCCGA pool=7
True Signal: fp=CCTTG pool=2
True Signal: fp=GCTTC pool=5
True Signal: fp=TTCGC pool=10
True Signal: fp=GCACG pool=10
True Signal: fp=TTGGC pool=12
True Signal: fp=GTGCT pool=9
True Signal: fp=ACGGG pool=11
True Signal: fp=ACGGG pool=3
True Signal: fp=GCGGC pool=11
True Signal: fp=TAGAA pool=15
True Signal: fp=CCACT pool=13
True Signal: fp=GGGCG pool=2
True Signal: fp=TCAGA pool=9
True Signal: fp=CGTAA pool=6
True Signal: fp=TAGAC pool=11
True Signal: fp=CTTAT pool=13
True Signal: fp=AGCCT pool=0
True Signal: fp=CGTAC pool=7
True Signal: fp=CATCG pool=7
True Signal: fp=TCGCA pool=7
True Signal: fp=TCCCG pool=11
True Signal: fp=AGTAG pool=9
True Signal: fp=AGGCT pool=10
True Signal: fp=GGCCT pool=8
True Signal: fp=TCGCG pool=5
True Signal: fp=GGTAG pool=10
True Signal: fp=GGTAG pool=3
```

```
True Signal: fp=GGGCT pool=8
True Signal: fp=TGGGG pool=1
True Signal: fp=AGTAT pool=0
True Signal: fp=ATGTC pool=9
True Signal: fp=TGACT pool=9
True Signal: fp=CTGTC pool=11
True Signal: fp=GTCTC pool=4
True Signal: fp=CTGTG pool=3
True Signal: fp=CTAAA pool=14
True Signal: fp=ACATC pool=13
True Signal: fp=GTAAA pool=13
True Signal: fp=ATAAG pool=13
True Signal: fp=AGCTA pool=4
True Signal: fp=GTCTT pool=13
True Signal: fp=AGCTG pool=3
True Signal: fp=AGGTC pool=1
True Signal: fp=CGCTG pool=12
True Signal: fp=GGCTC pool=14
True Signal: fp=AGGTG pool=8
True Signal: fp=GGGTA pool=10
True Signal: fp=GGGTA pool=15
True Signal: fp=GGCTG pool=2
True Signal: fp=GGGTC pool=10
True Signal: fp=CGAAA pool=3
True Signal: fp=ATTCA pool=13
True Signal: fp=ATTCA pool=6
True Signal: fp=TTCAA pool=9
True Signal: fp=TTCAA pool=12
True Signal: fp=AACGA pool=11
True Signal: fp=ACGAA pool=13
True Signal: fp=ATTCC pool=2
True Signal: fp=CCGAA pool=12
True Signal: fp=CCGAA pool=14
True Signal: fp=CATTC pool=13
True Signal: fp=CCATT pool=11
True Signal: fp=GGGTG pool=6
True Signal: fp=AGAAG pool=0
True Signal: fp=CCCAG pool=3
True Signal: fp=CCCAG pool=5
True Signal: fp=CACGC pool=10
True Signal: fp=CTTCC pool=14
True Signal: fp=CTTCC pool=6
True Signal: fp=TTATT pool=0
True Signal: fp=GATTC pool=12
True Signal: fp=GATTC pool=14
True Signal: fp=CAGGA pool=15
True Signal: fp=GCATT pool=15
True Signal: fp=AGCTT pool=4
True Signal: fp=ATTCG pool=9
True Signal: fp=ATTCG pool=5
True Signal: fp=CGAAG pool=14
True Signal: fp=CACGG pool=9
```

```
True Signal: fp=AAGGG pool=13
True Signal: fp=GAGGC pool=11
True Signal: fp=GGCTT pool=11
True Signal: fp=AAACT pool=4
True Signal: fp=TCAAA pool=4
True Signal: fp=TCAAC pool=5
True Signal: fp=CAACT pool=4
True Signal: fp=AGAAT pool=10
True Signal: fp=AATTT pool=8
True Signal: fp=TACCC pool=5
True Signal: fp=ACGAT pool=1
True Signal: fp=CGAAT pool=12
True Signal: fp=TAAGG pool=1
True Signal: fp=AAGGT pool=9
True Signal: fp=AAGGT pool=12
True Signal: fp=GCTGA pool=12
True Signal: fp=TGCAG pool=5
True Signal: fp=TAGCG pool=5
True Signal: fp=GCGAT pool=14
True Signal: fp=GCTGC pool=10
True Signal: fp=GCTGG pool=1
True Signal: fp=GGTCG pool=0
True Signal: fp=TCAAT pool=4
True Signal: fp=TAAGT pool=2
True Signal: fp=CCTGT pool=5
True Signal: fp=TCTCG pool=12
True Signal: fp=TGTGA pool=9
True Signal: fp=GCTGT pool=2
True Signal: fp=GGTCT pool=13
True Signal: fp=CAATA pool=7
True Signal: fp=GAATA pool=0
True Signal: fp=GAATA pool=15
True Signal: fp=ATTTA pool=1
True Signal: fp=ATTTA pool=12
```

```
SEQ ID NO:42
GGTAGGGGTA GACATCGCGT AAAAGGGGCG TACCCAGGAC CCCCCTTGGC
TCAATAAGTA GCGCTGGGGT GCTACTACGG GTCTCGACAC GCATTCAACT
AAAAGCTTCC ATTCGCACGG GCTTATTTAA CGAAGGTCGC GATAAGGTGC
CGAATAGGCT GCAGAGCGGC AGCCTGTCCA GTGAATGCTG TGAGGCCTCC
AGCTGACTCA TGAGAGAAGC CCAGTATTCA AACTACGATT CCACTCGACA
ATTTAGGATG TCTTCCCGAA AGCTATCGGG TAGAATATCA GATTCGTTTA
```

DotsOn=286

SEO ID NO:43

GGTAGGGGTA GACATCGCGT AAAAGGGGCG TACCCAGGAC CCCCCTTGGC TCAATAAGTA GCGCTGGGGT GCTACTACGG GTCTCGACAC GCATTCAACT AAAAGCTTCC ATTCGCACGG GCTTATTTAA CGAAGGTCGC GATAAGGTGC CGAATAGGCT GCAGAGCGGC AGCCTGTCCA GTGAATGCTG TGAGGCCTCC AGCTGACTA TGAGAGAAGC CCAGTATTCA AACTACGATT CCACTCGACA ATTTAGGATG TCTTCCCGAA AGCTATCGGG TAGAATATCA GATTCGTTTG

DotsOn=286

SEQ ID NO:44

GGTAGGGGTA GACATCGCGT AAAAGGGGCG TACCCAGGAC CCCCCTTGGC TCAATAAGTA GCGCTGGGGT GCTACTACGG GTCTCGACAC GCATTCAACT AAAAGCTTCC ATTCGCACGG GCTTATTTAA CGAAGGTCGC GATAAGGTGC CGAATAGGCT GCAGAGCGGC AGCCTGTCCA GTGAATGCTG TGAGGCCTCC AGCTGACTA TGAGAGAAGC CCAGTATTCA AACTACGATT CCACTCGACA ATTTAGGATG TCTTCCCGAA AGCTATCGGG TAGAATATCA GATTCGTTTT

DotsOn=286

SEQ ID NO:45

GTAGGGGTAG ACATCGCGTA AAAGGGGCGT ACCCAGGACC CCCCTTGGCT CAATAAGTAG CGCTGGGTG CTACTACGGG TCTCGACACG CATTCAACTA AAAGCTTCCA TTCGCACGGG CTTATTTAAC GAAGGTCGCG ATAAGGTGCC GAATAGGCTG CAGAGCGGCA GCCTGTCCAG TGAATGCTGT GAGGCCTCCA GCTGACTCAT GAGAGAAGCC CAGTATTCAA ACTACGATTC CACTCGACAA TTTAGGATGT CTTCCCGAAA GCTATCGGGT AGAATATCAG ATTCGTTTAA

True solution DotsOn=286

SEQ ID NO:46

GTAGGGGTAG ACATCGCGTA AAAGGGGCGT ACCCAGGACC CCCCTTGGCT CAATAAGTAG CGCTGGGGTG CTACTACGGG TCTCGACACG CATTCAACTA AAAGCTTCCA TTCGCACGGG CTTATTTAAC GAAGGTCGCG ATAAGGTGCC GAATAGGCTG CAGAGCGGCA GCCTGTCCAG TGAATGCTGT GAGGCCTCCA GCTGACTCAT GAGAGAAGCC CAGTATTCAA ACTACGATTC CACTCGACAA TTTAGGATGT CTTCCCGAAA GCTATCGGGT AGAATATCAG ATTCGTTTTG

DotsOn=286

Solutions: 5

r300.100.0.out

Using pool D16 Using sequence r300

True Signal: fp=CTCGA pool=7 True Signal: fp=CTACG pool=1 True Signal: fp=CTACG pool=2 True Signal: fp=GTACC pool=0 True Signal: fp=ATCGC pool=1 True Signal: fp=GAATG pool=15 True Signal: fp=ATCGG pool=13 True Signal: fp=GTCGC pool=13 True Signal: fp=ACCCA pool=14 True Signal: fp=CTGGG pool=10 True Signal: fp=CAATT pool=3 True Signal: fp=GACAA pool=1 True Signal: fp=TACTA pool=3 True Signal: fp=ACCCC pool=6 True Signal: fp=AGACA pool=10 True Signal: fp=TTCCA pool=8 True Signal: fp=TTCCA pool=4 True Signal: fp=ACGCA pool=8 True Signal: fp=GACAC pool=2 True Signal: fp=CGACA pool=10 True Signal: fp=CGACA pool=11 True Signal: fp=CTACT pool=10 True Signal: fp=CCCCC pool=9 True Signal: fp=CCCCC pool=14 True Signal: fp=TTCCC pool=12 True Signal: fp=GCCCA pool=1 True Signal: fp=GAGAA pool=8 True Signal: fp=CCAGC pool=5 True Signal: fp=CAGAG pool=3 True Signal: fp=GCAGA pool=1 True Signal: fp=GCAGC pool=12 True Signal: fp=CGCGA pool=3 True Signal: fp=AGCGC pool=0 True Signal: fp=GGACC pool=1 True Signal: fp=CCAGG pool=7 True Signal: fp=TTAGG pool=1 True Signal: fp=GAGAG pool=1 True Signal: fp=TAAAA pool=11 True Signal: fp=AGCGG pool=4 True Signal: fp=ACTAA pool=15 True Signal: fp=CGGGC pool=4 True Signal: fp=ACTAC pool=4 True Signal: fp=ACTAC pool=7 True Signal: fp=AGGGG pool=9 True Signal: fp=AGGGG pool=5 True Signal: fp=TTTAA pool=15 True Signal: fp=GGGGC pool=7

```
True Signal: fp=CAGAT pool=11
True Signal: fp=CATGA pool=14
True Signal: fp=AATGC pool=1
True Signal: fp=CCCCT pool=13
True Signal: fp=GACAT pool=4
True Signal: fp=TCTTC pool=8
True Signal: fp=CCAGT pool=10
True Signal: fp=CCAGT pool=9
True Signal: fp=GCTAC pool=9
True Signal: fp=TTTAG pool=11
True Signal: fp=TGAGA pool=12
True Signal: fp=TGCCG pool=8
True Signal: fp=GCGCT pool=15
True Signal: fp=CGCGT pool=4
True Signal: fp=TGAGG pool=7
True Signal: fp=TCGGG pool=1
True Signal: fp=CGGGT pool=8
True Signal: fp=CGGGT pool=12
True Signal: fp=GGCGT pool=12
True Signal: fp=TATCA pool=4
True Signal: fp=ATATC pool=2
True Signal: fp=CTATC pool=6
True Signal: fp=GGGGT pool=11
True Signal: fp=GGGGT pool=14
True Signal: fp=TATCG pool=3
True Signal: fp=GCTAT pool=3
True Signal: fp=GATGT pool=0
True Signal: fp=TGGCT pool=6
True Signal: fp=CTCAA pool=15
True Signal: fp=ATCAG pool=6
True Signal: fp=CGATA pool=8
True Signal: fp=CTGAC pool=5
True Signal: fp=GTATT pool=11
True Signal: fp=ATGAG pool=8
True Signal: fp=GCCTC pool=0
True Signal: fp=GTGAA pool=2
True Signal: fp=GCGTA pool=0
True Signal: fp=GCGTA pool=9
True Signal: fp=GCCTG pool=12
True Signal: fp=GGATG pool=1
True Signal: fp=GTGAG pool=0
True Signal: fp=TTAAC pool=2
True Signal: fp=AAAGC pool=1
True Signal: fp=AAAGC pool=6
True Signal: fp=AAGCC pool=8
True Signal: fp=CTCAT pool=8
True Signal: fp=AGATT pool=12
True Signal: fp=CAGCC pool=10
True Signal: fp=CGCAC pool=4
True Signal: fp=AAAGG pool=1
True Signal: fp=GACCC pool=9
True Signal: fp=CCCTT pool=1
```

```
True Signal: fp=CGATT pool=11
True Signal: fp=GAAGC pool=5
True Signal: fp=TCATG pool=1
True Signal: fp=AGGAC pool=15
True Signal: fp=TGCTA pool=4
True Signal: fp=GAAGG pool=10
True Signal: fp=AATAA pool=2
True Signal: fp=TGCTG pool=9
True Signal: fp=GGCAG pool=1
True Signal: fp=GAGCG pool=3
True Signal: fp=CTTGG pool=1
True Signal: fp=ACAAT pool=6
True Signal: fp=ACTCA pool=7
True Signal: fp=TCCAC pool=10
True Signal: fp=AATAG pool=13
True Signal: fp=GATAA pool=1
True Signal: fp=TACGA pool=6
True Signal: fp=TATTC pool=2
True Signal: fp=CCTCC pool=3
True Signal: fp=TAACG pool=14
True Signal: fp=AAGCT pool=12
True Signal: fp=AAGCT pool=5
True Signal: fp=ACTCG pool=15
True Signal: fp=CAGCT pool=9
True Signal: fp=TCCAG pool=8
True Signal: fp=TCCAG pool=2
True Signal: fp=CGCAT pool=11
True Signal: fp=TCGAC pool=9
True Signal: fp=TCGAC pool=13
True Signal: fp=GCTCA pool=5
True Signal: fp=AGGAT pool=8
True Signal: fp=TAGGA pool=15
True Signal: fp=AGTGA pool=14
True Signal: fp=TAGGC pool=13
True Signal: fp=TACGG pool=7
True Signal: fp=TAGGG pool=13
True Signal: fp=AATAT pool=13
True Signal: fp=GGTGC pool=1
True Signal: fp=GGTGC pool=4
True Signal: fp=TCCAT pool=9
True Signal: fp=TGAAT pool=10
True Signal: fp=TATTT pool=6
True Signal: fp=TGTCC pool=10
True Signal: fp=AACTA pool=11
True Signal: fp=AACTA pool=3
True Signal: fp=CACTC pool=7
True Signal: fp=CTCCA pool=6
True Signal: fp=AAGTA pool=7
True Signal: fp=CAGTA pool=8
True Signal: fp=GACTC pool=14
True Signal: fp=GTCCA pool=3
True Signal: fp=CTGCA pool=11
```

```
True Signal: fp=ATAGG pool=12
True Signal: fp=GTAGA pool=8
True Signal: fp=GTAGA pool=9
True Signal: fp=TGTCT pool=0
True Signal: fp=CAGTG pool=15
True Signal: fp=GTAGC pool=14
True Signal: fp=GTGCC pool=10
True Signal: fp=CAAAC pool=11
True Signal: fp=GTAGG pool=3
True Signal: fp=AAAAG pool=0
True Signal: fp=AAAAG pool=2
True Signal: fp=ACACG pool=5
True Signal: fp=GAAAG pool=14
True Signal: fp=CCCGA pool=15
True Signal: fp=AGCCC pool=10
True Signal: fp=AGAGA pool=13
True Signal: fp=ATGCT pool=6
True Signal: fp=AGAGC pool=14
True Signal: fp=GCTTA pool=9
True Signal: fp=AGGCC pool=12
True Signal: fp=CGGCA pool=10
True Signal: fp=GCCGA pool=7
True Signal: fp=CCTTG pool=2
True Signal: fp=GCTTC pool=5
True Signal: fp=TTCGC pool=10
True Signal: fp=GCACG pool=10
True Signal: fp=TTGGC pool=12
True Signal: fp=GTGCT pool=9
True Signal: fp=ACGGG pool=11
True Signal: fp=ACGGG pool=3
True Signal: fp=GCGGC pool=11
True Signal: fp=TAGAA pool=15
True Signal: fp=CCACT pool=13
True Signal: fp=GGGCG pool=2
True Signal: fp=TCAGA pool=9
True Signal: fp=CGTAA pool=6
True Signal: fp=TAGAC pool=11
True Signal: fp=CTTAT pool=13
True Signal: fp=AGCCT pool=0
True Signal: fp=CGTAC pool=7
True Signal: fp=CATCG pool=7
True Signal: fp=TCGCA pool=7
True Signal: fp=TCCCG pool=11
True Signal: fp=AGTAG pool=9
True Signal: fp=AGGCT pool=10
True Signal: fp=GGCCT pool=8
True Signal: fp=TCGCG pool=5
True Signal: fp=GGTAG pool=10
True Signal: fp=GGTAG pool=3
True Signal: fp=GGGCT pool=8
True Signal: fp=TGGGG pool=1
True Signal: fp=AGTAT pool=0
```

```
True Signal: fp=ATGTC pool=9
True Signal: fp=TGACT pool=9
True Signal: fp=CTGTC pool=11
True Signal: fp=GTCTC pool=4
True Signal: fp=CTGTG pool=3
True Signal: fp=CTAAA pool=14
True Signal: fp=ACATC pool=13
True Signal: fp=GTAAA pool=13
True Signal: fp=ATAAG pool=13
True Signal: fp=AGCTA pool=4
True Signal: fp=GTCTT pool=13
True Signal: fp=AGCTG pool=3
True Signal: fp=AGGTC pool=1
True Signal: fp=CGCTG pool=12
True Signal: fp=GGCTC pool=14
True Signal: fp=AGGTG pool=8
True Signal: fp=GGGTA pool=10
True Signal: fp=GGGTA pool=15
True Signal: fp=GGCTG pool=2
True Signal: fp=GGGTC pool=10
True Signal: fp=CGAAA pool=3
True Signal: fp=ATTCA pool=13
True Signal: fp=ATTCA pool=6
True Signal: fp=TTCAA pool=9
True Signal: fp=TTCAA pool=12
True Signal: fp=AACGA pool=11
True Signal: fp=ACGAA pool=13
True Signal: fp=ATTCC pool=2
True Signal: fp=CCGAA pool=12
True Signal: fp=CCGAA pool=14
True Signal: fp=CATTC pool=13
True Signal: fp=CCATT pool=11
True Signal: fp=GGGTG pool=6
True Signal: fp=AGAAG pool=0
True Signal: fp=CCCAG pool=3
True Signal: fp=CCCAG pool=5
True Signal: fp=CACGC pool=10
True Signal: fp=CTTCC pool=14
True Signal: fp=CTTCC pool=6
True Signal: fp=TTATT pool=0
True Signal: fp=GATTC pool=12
True Signal: fp=GATTC pool=14
True Signal: fp=CAGGA pool=15
True Signal: fp=GCATT pool=15
True Signal: fp=AGCTT pool=4
True Signal: fp=ATTCG pool=9
True Signal: fp=ATTCG pool=5
True Signal: fp=CGAAG pool=14
True Signal: fp=CACGG pool=9
True Signal: fp=AAGGG pool=13
True Signal: fp=GAGGC pool=11
True Signal: fp=GGCTT pool=11
```

```
True Signal: fp=AAACT pool=4
True Signal: fp=TCAAA pool=4
True Signal: fp=TCAAC pool=5
True Signal: fp=CAACT pool=4
True Signal: fp=AGAAT pool=10
True Signal: fp=AATTT pool=8
True Signal: fp=TACCC pool=5
True Signal: fp=ACGAT pool=1
True Signal: fp=CGAAT pool=12
True Signal: fp=TAAGG pool=1
True Signal: fp=AAGGT pool=9
True Signal: fp=AAGGT pool=12
True Signal: fp=GCTGA pool=12
True Signal: fp=TGCAG pool=5
True Signal: fp=TAGCG pool=5
True Signal: fp=GCGAT pool=14
True Signal: fp=GCTGC pool=10
True Signal: fp=GCTGG pool=1
True Signal: fp=GGTCG pool=0
True Signal: fp=TCAAT pool=4
True Signal: fp=TAAGT pool=2
True Signal: fp=CCTGT pool=5
True Signal: fp=TCTCG pool=12
True Signal: fp=TGTGA pool=9
True Signal: fp=GCTGT pool=2
True Signal: fp=GGTCT pool=13
True Signal: fp=CAATA pool=7
True Signal: fp=GAATA pool=0
True Signal: fp=GAATA pool=15
True Signal: fp=ATTTA pool=1
True Signal: fp=ATTTA pool=12
False positive Signal: fp=CTCTG pool=11
False positive Signal: fp=AACAT pool=6
False positive Signal: fp=GTGTC pool=0
False positive Signal: fp=GTACT pool=0
False positive Signal: fp=GAGAT pool=14
False positive Signal: fp=GGTTG pool=9
False positive Signal: fp=CTTTT pool=6
False positive Signal: fp=AGTAA pool=8
False positive Signal: fp=GCGGC pool=11
False positive Signal: fp=ATATA pool=11
False positive Signal: fp=CAAGA pool=9
False positive Signal: fp=GGGTT pool=10
False positive Signal: fp=CACCT pool=1
False positive Signal: fp=AAATA pool=0
False positive Signal: fp=AGCAT pool=6
False positive Signal: fp=GTGAT pool=11
False positive Signal: fp=GGTAG pool=6
False positive Signal: fp=GACTT pool=3
False positive Signal: fp=CCGGA pool=14
False positive Signal: fp=CGATC pool=15
False positive Signal: fp=CTTGT pool=0
```

```
False positive Signal: fp=CGGCC pool=6
False positive Signal: fp=GCGGA pool=5
False positive Signal: fp=ACATA pool=9
False positive Signal: fp=TGATA pool=9
False positive Signal: fp=ATAGC pool=10
False positive Signal: fp=CTGGT pool=10
False positive Signal: fp=ATCCC pool=8
False positive Signal: fp=ATTAG pool=6
False positive Signal: fp=AGCTA pool=5
False positive Signal: fp=GGCGG pool=12
False positive Signal: fp=TATCA pool=1
False positive Signal: fp=TCAGG pool=4
False positive Signal: fp=GATAG pool=9
False positive Signal: fp=TTGGT pool=2
False positive Signal: fp=TGACG pool=9
False positive Signal: fp=CCCTC pool=0
False positive Signal: fp=AGATG pool=10
False positive Signal: fp=CCGGC pool=14
False positive Signal: fp=TATAT pool=11
False positive Signal: fp=CATTA pool=14
False positive Signal: fp=GAGTA pool=10
False positive Signal: fp=TATAA pool=11
False positive Signal: fp=CGGTG pool=11
False positive Signal: fp=CCCTA pool=10
False positive Signal: fp=GCATA pool=14
False positive Signal: fp=TGGTC pool=0
False positive Signal: fp=AGGTT pool=11
False positive Signal: fp=CATAC pool=15
False positive Signal: fp=TCAGC pool=10
False positive Signal: fp=GGACT pool=12
False positive Signal: fp=TGCTC pool=13
False positive Signal: fp=CCATA pool=1
False positive Signal: fp=AATTA pool=13
False positive Signal: fp=GCGAA pool=15
False positive Signal: fp=ACCGG pool=11
False positive Signal: fp=GTTCA pool=2
False positive Signal: fp=AGTAC pool=7
False positive Signal: fp=GAGTC pool=6
False positive Signal: fp=GTGCT pool=12
False positive Signal: fp=TCACT pool=9
False positive Signal: fp=CTACA pool=8
False positive Signal: fp=GACGA pool=2
False positive Signal: fp=GGTCG pool=9
False positive Signal: fp=CTCAA pool=15
False positive Signal: fp=TCACT pool=15
False positive Signal: fp=AGATC pool=12
False positive Signal: fp=GTCGG pool=10
False positive Signal: fp=GGGGA pool=5
False positive Signal: fp=TGGAG pool=1
False positive Signal: fp=GGAGT pool=9
False positive Signal: fp=TGCCA pool=7
False positive Signal: fp=AAATC pool=13
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False positive Signal: fp=GACGC pool=8
False positive Signal: fp=TAAGT pool=4
False positive Signal: fp=TGACC pool=10
False positive Signal: fp=GGATC pool=11
False positive Signal: fp=GAAGG pool=7
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False positive Signal: fp=GTGGC pool=12
False positive Signal: fp=GAATC pool=13
False positive Signal: fp=CCATG pool=4
False positive Signal: fp=GATCA pool=10
False positive Signal: fp=CAGTA pool=3
False positive Signal: fp=CAACT pool=4
False positive Signal: fp=CGCCA pool=2
False positive Signal: fp=TATAG pool=1
False positive Signal: fp=TACTG pool=1
False positive Signal: fp=AAAGC pool=4
False positive Signal: fp=CGACG pool=14
False positive Signal: fp=GTACT pool=3
False positive Signal: fp=TAATG pool=7
False positive Signal: fp=CGCAC pool=10
False positive Signal: fp=GCCTC pool=0
False positive Signal: fp=AATTT pool=1
False positive Signal: fp=CTCAC pool=14
False positive Signal: fp=AGTCA pool=12
False positive Signal: fp=CAGAT pool=14
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- 293mers:12
- 294mers:10

295mers:9 296mers:8 297mers:7 298mers:6 299mers:5 300mers:3

SEQ ID NO:47

GTAGGGGTAG ACATCGCGTA AAAGGGGCGT ACCCAGGACC CCCCTTGGCT CAATAAGTAG CGCTGGGGTG CTACTACGGG TCTCGACACG CATTCAACTA AAAGCTTCCA TTCGCACGGG CTTATTTAAC GAAGGTCGCG ATAAGGTGCC GAATAGGCTG CAGAGCGGCA GCCTGTCCAG TGAATGCTGT GAGGCCTCCA GCTGACTCAT GAGAGAAGCC CAGTATTCAA ACTACGATTC CACTCGACAA TTTAGGATGT CTTCCCGAAA GCTATCGGGT AGAATATCAG ATTCGTTTAA

True solution DotsOn=286

SEO ID NO:48

GGTAGGGGTA GACATCGCGT AAAAGGGGCG TACCCAGGAC CCCCCTTGGC TCAATAAGTA GCGCTGGGGT GCTACTACGG GTCTCGACAC GCATTCAACT AAAAGCTTCC ATTCGCACGG GCTTATTTAA CGAAGGTCGC GATAAGGTGC CGAATAGGCT GCAGAGCGGC AGCCTGTCCA GTGAATGCTG TGAGGCCTCC AGCTGACTCA TGAGAGAAGC CCAGTATTCA AACTACGATT CCACTCGACA ATTTAGGATG TCTTCCCGAA AGCTATCGGG TAGAATATCA GATTCGTTTA

DotsOn=286

Solutions: 2

r300.300.0.out

Using pool D16 Using sequence r300

True Signal: fp=CTCGA pool=7 True Signal: fp=CTACG pool=1 True Signal: fp=CTACG pool=2 True Signal: fp=GTACC pool=0 True Signal: fp=ATCGC pool=1 True Signal: fp=GAATG pool=15 True Signal: fp=ATCGG pool=13 True Signal: fp=GTCGC pool=13 True Signal: fp=ACCCA pool=14 True Signal: fp=CTGGG pool=10 True Signal: fp=CAATT pool=3 True Signal: fp=GACAA pool=1 True Signal: fp=TACTA pool=3 True Signal: fp=ACCCC pool=6 True Signal: fp=AGACA pool=10 True Signal: fp=TTCCA pool=8 True Signal: fp=TTCCA pool=4 True Signal: fp=ACGCA pool=8

```
True Signal: fp=GACAC pool=2
True Signal: fp=CGACA pool=10
True Signal: fp=CGACA pool=11
True Signal: fp=CTACT pool=10
True Signal: fp=CCCCC pool=9
True Signal: fp=CCCCC pool=14
True Signal: fp=TTCCC pool=12
True Signal: fp=GCCCA pool=1
True Signal: fp=GAGAA pool=8
True Signal: fp=CCAGC pool=5
True Signal: fp=CAGAG pool=3
True Signal: fp=GCAGA pool=1
True Signal: fp=GCAGC pool=12
True Signal: fp=CGCGA pool=3
True Signal: fp=AGCGC pool=0
True Signal: fp=GGACC pool=1
True Signal: fp=CCAGG pool=7
True Signal: fp=TTAGG pool=1
True Signal: fp=GAGAG pool=1
True Signal: fp=TAAAA pool=11
True Signal: fp=AGCGG pool=4
True Signal: fp=ACTAA pool=15
True Signal: fp=CGGGC pool=4
True Signal: fp=ACTAC pool=4
True Signal: fp=ACTAC pool=7
True Signal: fp=AGGGG pool=9
True Signal: fp=AGGGG pool=5
True Signal: fp=TTTAA pool=15
True Signal: fp=GGGGC pool=7
True Signal: fp=CAGAT pool=11
True Signal: fp=CATGA pool=14
True Signal: fp=AATGC pool=1
True Signal: fp=CCCCT pool=13
True Signal: fp=GACAT pool=4
True Signal: fp=TCTTC pool=8
True Signal: fp=CCAGT pool=10
True Signal: fp=CCAGT pool=9
True Signal: fp=GCTAC pool=9
True Signal: fp=TTTAG pool=11
True Signal: fp=TGAGA pool=12
True Signal: fp=TGCCG pool=8
True Signal: fp=GCGCT pool=15
True Signal: fp=CGCGT pool=4
True Signal: fp=TGAGG pool=7
True Signal: fp=TCGGG pool=1
True Signal: fp=CGGGT pool=8
True Signal: fp=CGGGT pool=12
True Signal: fp=GGCGT pool=12
True Signal: fp=TATCA pool=4
True Signal: fp=ATATC pool=2
True Signal: fp=CTATC pool=6
True Signal: fp=GGGGT pool=11
```

```
True Signal: fp=GGGGT pool=14
True Signal: fp=TATCG pool=3
True Signal: fp=GCTAT pool=3
True Signal: fp=GATGT pool=0
True Signal: fp=TGGCT pool=6
True Signal: fp=CTCAA pool=15
True Signal: fp=ATCAG pool=6
True Signal: fp=CGATA pool=8
True Signal: fp=CTGAC pool=5
True Signal: fp=GTATT pool=11
True Signal: fp=ATGAG pool=8
True Signal: fp=GCCTC pool=0
True Signal: fp=GTGAA pool=2
True Signal: fp=GCGTA pool=0
True Signal: fp=GCGTA pool=9
True Signal: fp=GCCTG pool=12
True Signal: fp=GGATG pool=1
True Signal: fp=GTGAG pool=0
True Signal: fp=TTAAC pool=2
True Signal: fp=AAAGC pool=1
True Signal: fp=AAAGC pool=6
True Signal: fp=AAGCC pool=8
True Signal: fp=CTCAT pool=8
True Signal: fp=AGATT pool=12
True Signal: fp=CAGCC pool=10
True Signal: fp=CGCAC pool=4
True Signal: fp=AAAGG pool=1
True Signal: fp=GACCC pool=9
True Signal: fp=CCCTT pool=1
True Signal: fp=CGATT pool=11
True Signal: fp=GAAGC pool=5
True Signal: fp=TCATG pool=1
True Signal: fp=AGGAC pool=15
True Signal: fp=TGCTA pool=4
True Signal: fp=GAAGG pool=10
True Signal: fp=AATAA pool=2
True Signal: fp=TGCTG pool=9
True Signal: fp=GGCAG pool=1
True Signal: fp=GAGCG pool=3
True Signal: fp=CTTGG pool=1
True Signal: fp=ACAAT pool=6
True Signal: fp=ACTCA pool=7
True Signal: fp=TCCAC pool=10
True Signal: fp=AATAG pool=13
True Signal: fp=GATAA pool=1
True Signal: fp=TACGA pool=6
True Signal: fp=TATTC pool=2
True Signal: fp=CCTCC pool=3
True Signal: fp=TAACG pool=14
True Signal: fp=AAGCT pool=12
True Signal: fp=AAGCT pool=5
True Signal: fp=ACTCG pool=15
```

```
True Signal: fp=CAGCT pool=9
True Signal: fp=TCCAG pool=8
True Signal: fp=TCCAG pool=2
True Signal: fp=CGCAT pool=11
True Signal: fp=TCGAC pool=9
True Signal: fp=TCGAC pool=13
True Signal: fp=GCTCA pool=5
True Signal: fp=AGGAT pool=8
True Signal: fp=TAGGA pool=15
True Signal: fp=AGTGA pool=14
True Signal: fp=TAGGC pool=13
True Signal: fp=TACGG pool=7
True Signal: fp=TAGGG pool=13
True Signal: fp=AATAT pool=13
True Signal: fp=GGTGC pool=1
True Signal: fp=GGTGC pool=4
True Signal: fp=TCCAT pool=9
True Signal: fp=TGAAT pool=10
True Signal: fp=TATTT pool=6
True Signal: fp=TGTCC pool=10
True Signal: fp=AACTA pool=11
True Signal: fp=AACTA pool=3
True Signal: fp=CACTC pool=7
True Signal: fp=CTCCA pool=6
True Signal: fp=AAGTA pool=7
True Signal: fp=CAGTA pool=8
True Signal: fp=GACTC pool=14
True Signal: fp=GTCCA pool=3
True Signal: fp=CTGCA pool=11
True Signal: fp=ATAGG pool=12
True Signal: fp=GTAGA pool=8
True Signal: fp=GTAGA pool=9
True Signal: fp=TGTCT pool=0
True Signal: fp=CAGTG pool=15
True Signal: fp=GTAGC pool=14
True Signal: fp=GTGCC pool=10
True Signal: fp=CAAAC pool=11
True Signal: fp=GTAGG pool=3
True Signal: fp=AAAAG pool=0
True Signal: fp=AAAAG pool=2
True Signal: fp=ACACG pool=5
True Signal: fp=GAAAG pool=14
True Signal: fp=CCCGA pool=15
True Signal: fp=AGCCC pool=10
True Signal: fp=AGAGA pool=13
True Signal: fp=ATGCT pool=6
True Signal: fp=AGAGC pool=14
True Signal: fp=GCTTA pool=9
True Signal: fp=AGGCC pool=12
True Signal: fp=CGGCA pool=10
True Signal: fp=GCCGA pool=7
True Signal: fp=CCTTG pool=2
```

```
True Signal: fp=GCTTC pool=5
True Signal: fp=TTCGC pool=10
True Signal: fp=GCACG pool=10
True Signal: fp=TTGGC pool=12
True Signal: fp=GTGCT pool=9
True Signal: fp=ACGGG pool=11
True Signal: fp=ACGGG pool=3
True Signal: fp=GCGGC pool=11
True Signal: fp=TAGAA pool=15
True Signal: fp=CCACT pool=13
True Signal: fp=GGGCG pool=2
True Signal: fp=TCAGA pool=9
True Signal: fp=CGTAA pool=6
True Signal: fp=TAGAC pool=11
True Signal: fp=CTTAT pool=13
True Signal: fp=AGCCT pool=0
True Signal: fp=CGTAC pool=7
True Signal: fp=CATCG pool=7
True Signal: fp=TCGCA pool=7
True Signal: fp=TCCCG pool=11
True Signal: fp=AGTAG pool=9
True Signal: fp=AGGCT pool=10
True Signal: fp=GGCCT pool=8
True Signal: fp=TCGCG pool=5
True Signal: fp=GGTAG pool=10
True Signal: fp=GGTAG pool=3
True Signal: fp=GGGCT pool=8
True Signal: fp=TGGGG pool=1
True Signal: fp=AGTAT pool=0
True Signal: fp=ATGTC pool=9
True Signal: fp=TGACT pool=9
True Signal: fp=CTGTC pool=11
True Signal: fp=GTCTC pool=4
True Signal: fp=CTGTG pool=3
True Signal: fp=CTAAA pool=14
True Signal: fp=ACATC pool=13
True Signal: fp=GTAAA pool=13
True Signal: fp=ATAAG pool=13
True Signal: fp=AGCTA pool=4
True Signal: fp=GTCTT pool=13
True Signal: fp=AGCTG pool=3
True Signal: fp=AGGTC pool=1
True Signal: fp=CGCTG pool=12
True Signal: fp=GGCTC pool=14
True Signal: fp=AGGTG pool=8
True Signal: fp=GGGTA pool=10
True Signal: fp=GGGTA pool=15
True Signal: fp=GGCTG pool=2
True Signal: fp=GGGTC pool=10
True Signal: fp=CGAAA pool=3
True Signal: fp=ATTCA pool=13
True Signal: fp=ATTCA pool=6
```

```
True Signal: fp=TTCAA pool=9
True Signal: fp=TTCAA pool=12
True Signal: fp=AACGA pool≈11
True Signal: fp=ACGAA pool=13
True Signal: fp=ATTCC pool=2
True Signal: fp=CCGAA pool=12
True Signal: fp=CCGAA pool=14
True Signal: fp=CATTC pool=13
True Signal: fp=CCATT pool=11
True Signal: fp=GGGTG pool=6
True Signal: fp=AGAAG pool=0
True Signal: fp=CCCAG pool=3
True Signal: fp=CCCAG pool=5
True Signal: fp=CACGC pool=10
True Signal: fp=CTTCC pool=14
True Signal: fp=CTTCC pool=6
True Signal: fp=TTATT pool≈0
True Signal: fp=GATTC pool≈12
True Signal: fp=GATTC pool=14
True Signal: fp=CAGGA pool=15
True Signal: fp=GCATT pool≈15
True Signal: fp=AGCTT pool=4
True Signal: fp=ATTCG pool=9
True Signal: fp=ATTCG pool=5
True Signal: fp=CGAAG pool=14
True Signal: fp=CACGG pool=9
True Signal: fp=AAGGG pool=13
True Signal: fp=GAGGC pool≈11
True Signal: fp=GGCTT pool=11
True Signal: fp=AAACT pool=4
True Signal: fp=TCAAA pool=4
True Signal: fp=TCAAC pool≈5
True Signal: fp=CAACT pool=4
True Signal: fp=AGAAT pool=10
True Signal: fp=AATTT pool=8
True Signal: fp=TACCC pool=5
True Signal: fp=ACGAT pool=1
True Signal: fp=CGAAT pool=12
True Signal: fp=TAAGG pool=1
True Signal: fp=AAGGT pool=9
True Signal: fp=AAGGT pool=12
True Signal: fp=GCTGA pool=12
True Signal: fp=TGCAG pool=5
True Signal: fp=TAGCG pool=5
True Signal: fp=GCGAT pool=14
True Signal: fp=GCTGC pool=10
True Signal: fp=GCTGG pool=1
True Signal: fp=GGTCG pool=0
True Signal: fp=TCAAT pool=4
True Signal: fp=TAAGT pool=2
True Signal: fp=CCTGT pool=5
True Signal: fp=TCTCG pool=12
```

```
True Signal: fp=TGTGA pool=9
True Signal: fp=GCTGT pool=2
True Signal: fp=GGTCT pool=13
True Signal: fp=CAATA pool=7
True Signal: fp=GAATA pool=0
True Signal: fp=GAATA pool=15
True Signal: fp=ATTTA pool=1
True Signal: fp=ATTTA pool=12
False positive Signal: fp=AAACT pool=2
False positive Signal: fp=CCAGG pool=0
False positive Signal: fp=TAGTA pool=4
False positive Signal: fp=TCCCT pool=13
False positive Signal: fp=CTGTG pool=7
False positive Signal: fp=GCGTA pool=13
False positive Signal: fp=TCTAG pool=0
False positive Signal: fp=ACCTA pool=0
False positive Signal: fp=CACTT pool=10
False positive Signal: fp=GGAAG pool=12
False positive Signal: fp=CCGAC pool=3
False positive Signal: fp=TAGGG pool=12
False positive Signal: fp=TAGCG pool=4
False positive Signal: fp=TCTCC pool=15
False positive Signal: fp=CAGAA pool=9
False positive Signal: fp=TGCGC pool=9
False positive Signal: fp=CGAAT pool=2
False positive Signal: fp=CCGAG pool=9
False positive Signal: fp=CATGC pool=4
False positive Signal: fp=GTATC pool=1
False positive Signal: fp=TCGCT pool=2
False positive Signal: fp=AGGTA pool=14
False positive Signal: fp=AACCC pool=13
False positive Signal: fp=TACCC pool=6
False positive Signal: fp=GTTAA pool=8
False positive Signal: fp=TGGAG pool=12
False positive Signal: fp=ATTCC pool=9
False positive Signal: fp=TCACA pool=15
False positive Signal: fp=CTGCT pool=3
False positive Signal: fp=TGCCG pool=2
False positive Signal: fp=ACTCG pool=4
False positive Signal: fp=CGCAC pool=14
False positive Signal: fp=CTTCG pool=15
False positive Signal: fp=CCTGG pool=0
False positive Signal: fp=AGAAG pool=2
False positive Signal: fp=CTTAA pool=3
False positive Signal: fp=ACGGT pool=9
False positive Signal: fp=CTTGG pool=3
False positive Signal: fp=AGATC pool=12
False positive Signal: fp=GACCG pool=5
False positive Signal: fp=CCGTT pool=8
False positive Signal: fp=CACTC pool=12
False positive Signal: fp=ATTGG pool=5
False positive Signal: fp=AACAC pool=14
```

```
False positive Signal: fp=GTACC pool=14
False positive Signal: fp=CCCGT pool=4
False positive Signal: fp=AGTGG pool=6
False positive Signal: fp=AGGTC pool=9
False positive Signal: fp=GAACC pool=1
False positive Signal: fp=GATTC pool=12
False positive Signal: fp=AAGCT pool=1
False positive Signal: fp=GCACC pool=7
False positive Signal: fp=GCCCT pool=5
False positive Signal: fp=GCTGC pool=0
False positive Signal: fp=GACAA pool=7
False positive Signal: fp=TCGCT pool=0
False positive Signal: fp=CGTAA pool=2
False positive Signal: fp=CGAGT pool=3
False positive Signal: fp=AATGC pool=7
False positive Signal: fp=AAACT pool=5
False positive Signal: fp=CGATG pool=7
False positive Signal: fp=ATCCA pool=14
False positive Signal: fp=GGTCG pool=1
False positive Signal: fp=ACCGC pool=2
False positive Signal: fp=TATCA pool=0
False positive Signal: fp=AATCC pool=4
False positive Signal: fp=GAGGA pool=14
False positive Signal: fp=TATAC pool=5
False positive Signal: fp=TCGCG pool=2
False positive Signal: fp=GAGGG pool=5
False positive Signal: fp=ATTGA pool=5
False positive Signal: fp=TCAGA pool=15
False positive Signal: fp=CGGCC pool=1
False positive Signal: fp=TCGCT pool=7
False positive Signal: fp=TCTCA pool=10
False positive Signal: fp=TCTGT pool=11
False positive Signal: fp=GTGGT pool=4
False positive Signal: fp=CTTCC pool=5
False positive Signal: fp=GACAA pool=14
False positive Signal: fp=CTGCC pool=5
False positive Signal: fp=CAACT pool=6
False positive Signal: fp=CGAAG pool=13
False positive Signal: fp=TCGCA pool=15
False positive Signal: fp=CTTGT pool=13
False positive Signal: fp=GGTCC pool=13
False positive Signal: fp=ATGTT pool=14
False positive Signal: fp=CGGCG pool=3
False positive Signal: fp=CGAGC pool=2
False positive Signal: fp=AAGCA pool=14
False positive Signal: fp=CAAGG pool=9
False positive Signal: fp=TGGCT pool=15
False positive Signal: fp=AGGAT pool=8
False positive Signal: fp=ACGGG pool=9
False positive Signal: fp=AGATG pool=15
False positive Signal: fp=CCCAA pool=0
False positive Signal: fp=ACTTC pool=1
```

```
False positive Signal: fp=TCCTT pool=15
False positive Signal: fp=CCAGG pool=6
False positive Signal: fp=TGCGT pool=4
False positive Signal: fp=CTACT pool=4
False positive Signal: fp=AATTG pool=3
False positive Signal: fp=GGAGC pool=6
False positive Signal: fp=AACAG pool=9
False positive Signal: fp=GGATT pool=12
False positive Signal: fp=ATGAA pool=8
False positive Signal: fp=AGGTT pool=11
False positive Signal: fp=GCCTT pool=2
False positive Signal: fp=TGCCG pool=12
False positive Signal: fp=ACTCC pool=13
False positive Signal: fp=ACCAG pool=13
False positive Signal: fp=CTCTG pool=4
False positive Signal: fp=CAGTT pool=15
False positive Signal: fp=CTAAG pool=10
False positive Signal: fp=ATCGG pool=0
False positive Signal: fp=CCGTC pool=5
False positive Signal: fp=TGCTC pool=4
False positive Signal: fp=ATCTG pool=4
False positive Signal: fp=GGCGT pool=6
False positive Signal: fp=TACCA pool=9
False positive Signal: fp=GTGGG pool=6
False positive Signal: fp=ACGTA pool=12
False positive Signal: fp=ACGTG pool=9
False positive Signal: fp=CTGTA pool=11
False positive Signal: fp=GCAGA pool=12
False positive Signal: fp=GCCGC pool=9
False positive Signal: fp=ATCAG pool=14
False positive Signal: fp=AAAAG pool=0
False positive Signal: fp=GTGGG pool=10
False positive Signal: fp=AACCA pool=5
False positive Signal: fp=GGACG pool=7
False positive Signal: fp=GCCGG pool=6
False positive Signal: fp=GCGAC pool=11
False positive Signal: fp=GCCAC pool=3
False positive Signal: fp=AGGCC pool=4
False positive Signal: fp=ACGCA pool=15
False positive Signal: fp=ACTGA pool=15
False positive Signal: fp=AATTC pool=10
False positive Signal: fp=GCAAC pool=0
False positive Signal: fp=GTTTA pool=7
False positive Signal: fp=AGCAA pool=2
False positive Signal: fp=GCAAC pool=7
False positive Signal: fp=CGAAA pool=14
False positive Signal: fp=GTGCA pool=4
False positive Signal: fp=GCTGT pool=5
False positive Signal: fp=AATGA pool=15
False positive Signal: fp=GATGA pool=4
False positive Signal: fp=GTAAG pool=2
False positive Signal: fp=GTCGG pool=1
```

```
False positive Signal: fp=TATAC pool=1
False positive Signal: fp=AAAGT pool=2
False positive Signal: fp=AGCGC pool=13
False positive Signal: fp=GTTCT pool=13
False positive Signal: fp=GGGCG pool=3
False positive Signal: fp=AAAAT pool=7
False positive Signal: fp=GTAGG pool=1
False positive Signal: fp=AAGAT pool=14
False positive Signal: fp=CATGC pool=3
False positive Signal: fp=CGGTG pool=7
False positive Signal: fp=AGAGT pool=9
False positive Signal: fp=GGATT pool=5
False positive Signal: fp=ATTAT pool=12
False positive Signal: fp=TGTGA pool=0
False positive Signal: fp=CTGAT pool=15
False positive Signal: fp=TGGTC pool=13
False positive Signal: fp=GTTTA pool=2
False positive Signal: fp=AAATC pool=1
False positive Signal: fp=TAGTA pool=3
False positive Signal: fp=AAACA pool=9
False positive Signal: fp=GTCGT pool=10
False positive Signal: fp=TCGTC pool=4
False positive Signal: fp=AAACT pool=10
False positive Signal: fp=AGCCT pool=5
False positive Signal: fp=CAGTC pool=9
False positive Signal: fp=AGATC pool=1
False positive Signal: fp=CTCTG pool=3
False positive Signal: fp=TGTCC pool=9
False positive Signal: fp=CTGCT pool=15
False positive Signal: fp=GGTAG pool=14
False positive Signal: fp=CTCTT pool=11
False positive Signal: fp=CCCTT pool=2
False positive Signal: fp=GAATA pool=14
False positive Signal: fp=TAACC pool=0
False positive Signal: fp=GCTAT pool=8
False positive Signal: fp=TACTG pool=2
False positive Signal: fp=ATGTT pool=3
False positive Signal: fp=GACGA pool=12
False positive Signal: fp=ACAAC pool=14
False positive Signal: fp=TCGAC pool=2
False positive Signal: fp=ATGGA pool=9
False positive Signal: fp=CAGTT pool=1
False positive Signal: fp=GGGCT pool=12
False positive Signal: fp=ACCGG pool=1
False positive Signal: fp=TGCGA pool=12
False positive Signal: fp=GGGTG pool=1
False positive Signal: fp=TGTCA pool=1
False positive Signal: fp=GCCCT pool=5
False positive Signal: fp=CGCTG pool=10
False positive Signal: fp=GCATG pool=11
False positive Signal: fp=TGGCT pool=12
False positive Signal: fp=CGGAG pool=13
```

```
False positive Signal: fp=CTCCG pool=3
False positive Signal: fp=CGAAA pool=0
False positive Signal: fp=ACTGG pool=2
False positive Signal: fp=ATCTT pool=6
False positive Signal: fp=AACCT pool=1
False positive Signal: fp=GGACG pool=10
False positive Signal: fp=CGATA pool=11
False positive Signal: fp=ATATA pool=7
False positive Signal: fp=TCGGT pool=10
False positive Signal: fp=TACCT pool=9
False positive Signal: fp=TCAAG pool=1
False positive Signal: fp=GTCGT pool=0
False positive Signal: fp=TATCA pool=1
False positive Signal: fp=GCTAC pool=10
False positive Signal: fp=GTCTT pool=11
False positive Signal: fp=GTATC pool=5
False positive Signal: fp=TCGCC pool=1
False positive Signal: fp=GTTTA pool=14
False positive Signal: fp=GCATT pool=6
False positive Signal: fp=TATAG pool=5
False positive Signal: fp=TCACC pool=5
False positive Signal: fp=TCGCA pool=11
False positive Signal: fp=AACCC pool=15
False positive Signal: fp=TATGC pool=6
False positive Signal: fp=TGGAT pool=0
False positive Signal: fp=TATCC pool=4
False positive Signal: fp=TCAGG pool=8
False positive Signal: fp=CACAA pool=4
False positive Signal: fp=TGCCC pool=11
False positive Signal: fp=GTTCT pool=5
False positive Signal: fp=TACAT pool=8
False positive Signal: fp=TGTTT pool=9
False positive Signal: fp=ACATT pool=7
False positive Signal: fp=AAGCT pool=1
False positive Signal: fp=CGGAC pool=2
False positive Signal: fp=AGAAT pool=13
False positive Signal: fp=AGGCG pool=6
False positive Signal: fp=GCTGT pool=1
False positive Signal: fp=GGGGT pool=1
False positive Signal: fp=TGGTG pool=2
False positive Signal: fp=TCGAT pool=9
False positive Signal: fp=GATCA pool=13
False positive Signal: fp=CCGGT pool=10
False positive Signal: fp=ATTGT pool=8
False positive Signal: fp=ATCAC pool=5
False positive Signal: fp=GGAAG pool=15
False positive Signal: fp=GACTA pool=0
False positive Signal: fp=TCTAT pool=0
False positive Signal: fp=AAGCT pool=15
False positive Signal: fp=ATTTA pool=5
False positive Signal: fp=GTTAA pool=7
False positive Signal: fp=ATAAT pool=12
```

```
False positive Signal: fp=AAGTC pool=9
False positive Signal: fp=GCCTA pool=9
False positive Signal: fp=AGCCA pool=4
False positive Signal: fp=AACGC pool=3
False positive Signal: fp=GGTAA pool=15
False positive Signal: fp=TACTA pool≈11
False positive Signal: fp=GAGCC pool=6
False positive Signal: fp=AGAAT pool=6
False positive Signal: fp=AATTG pool=12
False positive Signal: fp=TGCCC pool=11
False positive Signal: fp=AGTAA pool=12
False positive Signal: fp=GTAGC pool=4
False positive Signal: fp=TCGAG pool=4
False positive Signal: fp=TGCAG pool=0
False positive Signal: fp=GAGTA pool=1
False positive Signal: fp=GTACC pool=11
False positive Signal: fp=TCCTG pool=5
False positive Signal: fp=CCTGA pool=10
False positive Signal: fp=GTATG pool=1
False positive Signal: fp=ACAGA pool=7
False positive Signal: fp=GCGTC pool=15
False positive Signal: fp=ATCGA pool=4
False positive Signal: fp=ATCCT pool=5
False positive Signal: fp=TCGTG pool=0
False positive Signal: fp=TCTCT pool≈15
False positive Signal: fp=AGCAA pool=8
False positive Signal: fp=GCGCT pool≈10
False positive Signal: fp=ACTTC pool=5
False positive Signal: fp=TCCAG pool=3
False positive Signal: fp=ACGCG pool=7
False positive Signal: fp=GAGCA pool=5
False positive Signal: fp=TCAAC pool=4
False positive Signal: fp=CCTTG pool=1
False positive Signal: fp=GAGAT pool=11
False positive Signal: fp=CTGAA pool=0
False positive Signal: fp=CTGGC pool=0
False positive Signal: fp=ACCTG pool=6
False positive Signal: fp=GATAC pool=13
False positive Signal: fp=TAGTG pool=7
False positive Signal: fp=TCGAC pool=13
False positive Signal: fp=ATTGA pool=15
False positive Signal: fp=TGTCG pool=2
False positive Signal: fp=CGTGC pool=6
False positive Signal: fp=CAGTG pool=10
False positive Signal: fp=GAGTC pool=11
False positive Signal: fp=AAGTT pool=11
False positive Signal: fp=AGAGA pool=2
False positive Signal: fp=ATATA pool=8
10mers:37056
11mers:6330
12mers:1360
13mers:536
```

- 14mers:412
- 15mers:395
- 16mers:390
- 17mers:382
- 18mers:379
- 19mers:376
- 20mers:372
- 21mers:372
- 22mers:377
- 23mers:371
- 24mers:369
- 25mers:367
- 26mers:363
- 27mers:365
- 28mers:371
- 29mers:366
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- 47mers:335
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- 49mers:333 50mers:325
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- 52mers:321
- 53mers:322
- 54mers:324
- 55mers:323
- 56mers:319
- 57mers:319
- 58mers:319
- 59mers:318
- 60mers:319
- 61mers:315
- 62mers:315
- 63mers:312
- 64mers:309
- 65mers:312

66mers:312 67mers:309 68mers:308 69mers:304 70mers:302 71mers:301 72mers:297 73mers:297 74mers:298 75mers:295 76mers:290 77mers:288 78mers:290 79mers:287 80mers:284 81mers:284 82mers:284 83mers:285 84mers:283 85mers:284 86mers:282 87mers:278 88mers:276 89mers:276 90mers:278 91mers:282 92mers:277 93mers:270 94mers:270 95mers:269 96mers:268 97mers:270 98mers:269 99mers:267 100mers:265 101mers:266 102mers:265 103mers:265 104mers:261 105mers:258

106mers:258 107mers:260 108mers:254 109mers:250 110mers:250 111mers:248 112mers:244 113mers:244 114mers:245 115mers:247 116mers:248 117mers:245

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- 118mers:245 119mers:241 120mers:239
- 121mers:235
- 122mers:234
- 123mers:236
- 124mers:235
- 125mers:235
- 126mers:232
- 127mers:230
- 128mers:232
- 129mers:232
- 130mers:226
- 131mers:224
- 132mers:220
- 133mers:221
- 134mers:219
- 135mers:219
- 136mers:220
- 137mers:217
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- 139mers:213
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- 142mers:211
- 143mers:208
- 144mers:211
- 145mers:210 146mers:207
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- 150mers:203
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- 154mers:194
- 155mers:197
- 156mers:194
- 157mers:190
- 158mers:188
- 159mers:187
- 160mers:186 161mers:188
- 162mers:187
- 163mers:184
- 164mers:184
- 165mers:186
- 166mers:184
- 167mers:183
- 168mers:182
- 169mers:178

170mers:174 171mers:174 172mers:174 173mers:169 174mers:168 175mers:170 176mers:170 177mers:166 178mers:166 179mers:164 180mers:165 181mers:167 182mers:161 183mers:159 184mers:159 185mers:159 186mers:155 187mers:156 188mers:154 189mers:151 190mers:150 191mers:154 192mers:152 193mers:150 194mers:150 195mers:144 196mers:143 197mers:144 198mers:140 199mers:141 200mers:142 201mers:137 202mers:136 203mers:136 204mers:135 205mers:134 206mers:132 207mers:129 208mers:128 209mers:124 210mers:123 211mers:123 212mers:122 213mers:122 214mers:123 215mers:121 216mers:119 217mers:121 218mers:121 219mers:121 220mers:120

221mers:115

- 222mers:111
- 223mers:112
- 224mers:112
- 225mers:109
- 226mers:111
- 227mers:107
- 228mers:104
- 229mers:104
- 230mers:103
- 231mers:101
- 232mers:102
- 233mers:99
- 234mers:96
- 235mers:94
- 236mers:91
- 237mers:92
- 238mers:92
- 239mers:90
- 240mers:85
- 241mers:84
- 242mers:82
- 243mers:80
- 244mers:79
- 245mers:80
- 246mers:78
- 247mers:77
- 248mers:75
- 249mers:74
- 250mers:75
- 251mers:74
- 252mers:72
- 253mers:71
- 254mers:74
- 255mers:72
- 256mers:68
- 257mers:65
- 258mers:66 259mers:63
- 260mers:62
- 261mers:61
- 262mers:59
- 263mers:58
- 264mers:57
- 265mers:59
- 266mers:60
- 267mers:60
- 268mers:56
- 269mers:52
- 270mers:50
- 271mers:51
- 272mers:48
- 273mers:48

```
274mers:49
275mers:43
276mers:40
277mers:41
278mers:40
279mers:39
280mers:38
281mers:32
282mers:29
283mers:29
284mers:29
285mers:27
286mers:26
287mers:23
288mers:19
289mers:17
290mers:17
291mers:15
292mers:13
293mers:12
294mers:9
295mers:7
296mers:6
297mers:5
298mers:4
299mers:3
300mers:1
```

SEQ ID NO:49

GTAGGGGTAG ACATCGCGTA AAAGGGGCGT ACCCAGGACC CCCCTTGGCT CAATAAGTAG CGCTGGGGTG CTACTACGGG TCTCGACACG CATTCAACTA AAAGCTTCCA TTCGCACGGG CTTATTTAAC GAAGGTCGCG ATAAGGTGCC GAATAGGCTG CAGAGCGGCA GCCTGTCCAG TGAATGCTGT GAGGCCTCCA GCTGACTAT GAGAGAAGCC CAGTATTCAA ACTACGATTC CACTCGACAA TTTAGGATGT CTTCCCGAAA GCTATCGGGT AGAATATCAG ATTCGTTTAA

True solution DotsOn=286

Solutions: 1

r300.100.15.out

Using pool D16 Using sequence r300

```
True Signal: fp=CTCGA pool=7
True Signal: fp=CTACG pool=1
True Signal: fp=CTACG pool=2
True Signal: fp=GTACC pool=0
True Signal: fp=ATCGC pool=1
True Signal: fp=GAATG pool=15
True Signal: fp=ATCGG pool=13
True Signal: fp=GTCGC pool=13
True Signal: fp=ACCCA pool=14
True Signal: fp=CTGGG pool=10
True Signal: fp=CAATT pool=3
True Signal: fp=GACAA pool=1
True Signal: fp=TACTA pool=3
True Signal: fp=ACCCC pool=6
True Signal: fp=AGACA pool=10
True Signal: fp=TTCCA pool=8
True Signal: fp=TTCCA pool=4
True Signal: fp=ACGCA pool=8
True Signal: fp=GACAC pool=2
True Signal: fp=CGACA pool=10
True Signal: fp=CGACA pool=11
True Signal: fp=CTACT pool=10
True Signal: fp=CCCCC pool=9
True Signal: fp=CCCCC pool=14
True Signal: fp=TTCCC pool=12
True Signal: fp=GCCCA pool=1
True Signal: fp=GAGAA pool=8
True Signal: fp=CCAGC pool=5
True Signal: fp=CAGAG pool=3
True Signal: fp=GCAGA pool=1
True Signal: fp=GCAGC pool=12
True Signal: fp=CGCGA pool=3
True Signal: fp=AGCGC pool=0
True Signal: fp=GGACC pool=1
True Signal: fp=CCAGG pool=7
True Signal: fp=TTAGG pool=1
True Signal: fp=GAGAG pool=1
True Signal: fp=TAAAA pool=11
True Signal: fp=AGCGG pool=4
True Signal: fp=ACTAA pool=15
True Signal: fp=CGGGC pool=4
True Signal: fp=ACTAC pool=4
True Signal: fp=ACTAC pool=7
True Signal: fp=AGGGG pool=9
True Signal: fp=AGGGG pool=5
True Signal: fp=TTTAA pool=15
True Signal: fp=GGGGC pool=7
```

```
True Signal: fp=CAGAT pool=11
True Signal: fp=CATGA pool=14
True Signal: fp=AATGC pool=1
True Signal: fp=CCCCT pool=13
True Signal: fp=GACAT pool=4
True Signal: fp=TCTTC pool=8
True Signal: fp=CCAGT pool=10
True Signal: fp=CCAGT pool=9
True Signal: fp=GCTAC pool=9
True Signal: fp=TTTAG pool=11
True Signal: fp=TGAGA pool=12
True Signal: fp=TGCCG pool=8
True Signal: fp=GCGCT pool=15
True Signal: fp=CGCGT pool=4
True Signal: fp=TGAGG pool=7
True Signal: fp=TCGGG pool=1
True Signal: fp=CGGGT pool=8
True Signal: fp=CGGGT pool=12
True Signal: fp=GGCGT pool=12
True Signal: fp=TATCA pool=4
True Signal: fp=ATATC pool=2
True Signal: fp=CTATC pool=6
True Signal: fp=GGGGT pool=11
True Signal: fp=GGGGT pool=14
True Signal: fp=TATCG pool=3
True Signal: fp=GCTAT pool=3
True Signal: fp=GATGT pool=0
True Signal: fp=TGGCT pool=6
True Signal: fp=CTCAA pool=15
True Signal: fp=ATCAG pool=6
True Signal: fp=CGATA pool=8
True Signal: fp=CTGAC pool=5
True Signal: fp=GTATT pool=11
True Signal: fp=ATGAG pool=8
True Signal: fp=GCCTC pool=0
True Signal: fp=GTGAA pool=2
True Signal: fp=GCGTA pool=0
True Signal: fp=GCGTA pool=9
True Signal: fp=GCCTG pool=12
True Signal: fp=GGATG pool=1
True Signal: fp=GTGAG pool=0
True Signal: fp=TTAAC pool=2
True Signal: fp=AAAGC pool=1
True Signal: fp=AAAGC pool=6
True Signal: fp=AAGCC pool=8
True Signal: fp=CTCAT pool=8
True Signal: fp=AGATT pool=12
True Signal: fp=CAGCC pool=10
True Signal: fp=CGCAC pool=4
True Signal: fp=AAAGG pool=1
True Signal: fp=GACCC pool=9
True Signal: fp=CCCTT pool=1
```

```
True Signal: fp=CGATT pool=11
True Signal: fp=GAAGC pool=5
True Signal: fp=TCATG pool=1
True Signal: fp=AGGAC pool=15
True Signal: fp=TGCTA pool=4
True Signal: fp=GAAGG pool=10
True Signal: fp=AATAA pool=2
True Signal: fp=TGCTG pool=9
True Signal: fp=GGCAG pool=1
True Signal: fp=GAGCG pool=3
True Signal: fp=CTTGG pool=1
True Signal: fp=ACAAT pool=6
True Signal: fp=ACTCA pool=7
True Signal: fp=TCCAC pool=10
True Signal: fp=AATAG pool=13
True Signal: fp=GATAA pool=1
True Signal: fp=TACGA pool=6
True Signal: fp=TATTC pool=2
True Signal: fp=CCTCC pool=3
True Signal: fp=TAACG pool=14
True Signal: fp=AAGCT pool=12
True Signal: fp=AAGCT pool=5
True Signal: fp=ACTCG pool=15
True Signal: fp=CAGCT pool=9
True Signal: fp=TCCAG pool=8
True Signal: fp=TCCAG pool=2
True Signal: fp=CGCAT pool=11
True Signal: fp=TCGAC pool=9
True Signal: fp=TCGAC pool=13
True Signal: fp=GCTCA pool=5
True Signal: fp=AGGAT pool=8
True Signal: fp=TAGGA pool=15
True Signal: fp=AGTGA pool=14
True Signal: fp=TAGGC pool=13
True Signal: fp=TACGG pool=7
True Signal: fp=TAGGG pool=13
True Signal: fp=AATAT pool=13
True Signal: fp=GGTGC pool=1
True Signal: fp=GGTGC pool=4
True Signal: fp=TCCAT pool=9
True Signal: fp=TGAAT pool=10
True Signal: fp=TATTT pool=6
True Signal: fp=TGTCC pool=10
True Signal: fp=AACTA pool=11
True Signal: fp=AACTA pool=3
True Signal: fp=CACTC pool=7
True Signal: fp=CTCCA pool=6
True Signal: fp=AAGTA pool=7
True Signal: fp=CAGTA pool=8
True Signal: fp=GACTC pool=14
True Signal: fp=GTCCA pool=3
True Signal: fp=CTGCA pool=11
```

```
True Signal: fp=ATAGG pool=12
True Signal: fp=GTAGA pool=8
True Signal: fp=GTAGA pool=9
True Signal: fp=TGTCT pool=0
True Signal: fp=CAGTG pool=15
True Signal: fp=GTAGC pool=14
True Signal: fp=GTGCC pool=10
True Signal: fp=CAAAC pool=11
True Signal: fp=GTAGG pool=3
True Signal: fp=AAAAG pool=0
True Signal: fp=AAAAG pool=2
True Signal: fp=ACACG pool=5
True Signal: fp=GAAAG pool=14
True Signal: fp=CCCGA pool=15
True Signal: fp=AGCCC pool=10
True Signal: fp=AGAGA pool=13
True Signal: fp=ATGCT pool=6
True Signal: fp=AGAGC pool=14
True Signal: fp=GCTTA pool=9
True Signal: fp=AGGCC pool=12
True Signal: fp=CGGCA pool=10
True Signal: fp=GCCGA pool=7
True Signal: fp=CCTTG pool=2
True Signal: fp=GCTTC pool=5
True Signal: fp=TTCGC pool=10
True Signal: fp=GCACG pool=10
True Signal: fp=TTGGC pool=12
True Signal: fp=GTGCT pool=9
True Signal: fp=ACGGG pool=11
True Signal: fp=ACGGG pool=3
True Signal: fp=GCGGC pool=11
True Signal: fp=TAGAA pool=15
True Signal: fp=CCACT pool=13
True Signal: fp=GGGCG pool=2
True Signal: fp=TCAGA pool=9
True Signal: fp=CGTAA pool=6
True Signal: fp=TAGAC pool=11
True Signal: fp=CTTAT pool=13
True Signal: fp=AGCCT pool=0
True Signal: fp=CGTAC pool=7
True Signal: fp=CATCG pool=7
True Signal: fp=TCGCA pool=7
True Signal: fp=TCCCG pool=11
True Signal: fp=AGTAG pool=9
True Signal: fp=AGGCT pool=10
True Signal: fp=GGCCT pool=8
True Signal: fp=TCGCG pool=5
True Signal: fp=GGTAG pool=10
True Signal: fp=GGTAG pool=3
True Signal: fp=GGGCT pool=8
True Signal: fp=TGGGG pool=1
True Signal: fp=AGTAT pool=0
```

```
True Signal: fp=ATGTC pool=9
True Signal: fp=TGACT pool=9
True Signal: fp=CTGTC pool=11
True Signal: fp=GTCTC pool=4
True Signal: fp=CTGTG pool=3
True Signal: fp=CTAAA pool=14
True Signal: fp=ACATC pool=13
True Signal: fp=GTAAA pool=13
True Signal: fp=ATAAG pool=13
True Signal: fp=AGCTA pool=4
True Signal: fp=GTCTT pool=13
True Signal: fp=AGCTG pool=3
True Signal: fp=AGGTC pool=1
True Signal: fp=CGCTG pool=12
True Signal: fp=GGCTC pool=14
True Signal: fp=AGGTG pool=8
True Signal: fp=GGGTA pool=10
True Signal: fp=GGGTA pool=15
True Signal: fp=GGCTG pool=2
True Signal: fp=GGGTC pool=10
True Signal: fp=CGAAA pool=3
True Signal: fp=ATTCA pool=13
True Signal: fp=ATTCA pool=6
True Signal: fp=TTCAA pool=9
True Signal: fp=TTCAA pool=12
True Signal: fp=AACGA pool=11
True Signal: fp=ACGAA pool=13
True Signal: fp=ATTCC pool=2
True Signal: fp=CCGAA pool=12
True Signal: fp=CCGAA pool=14
True Signal: fp=CATTC pool=13
True Signal: fp=CCATT pool=11
True Signal: fp=GGGTG pool=6
True Signal: fp=AGAAG pool=0
True Signal: fp=CCCAG pool=3
True Signal: fp=CCCAG pool=5
True Signal: fp=CACGC pool=10
True Signal: fp=CTTCC pool=14
True Signal: fp=CTTCC pool=6
True Signal: fp=TTATT pool=0
True Signal: fp=GATTC pool=12
True Signal: fp=GATTC pool=14
True Signal: fp=CAGGA pool=15
True Signal: fp=GCATT pool=15
True Signal: fp=AGCTT pool=4
True Signal: fp=ATTCG pool=9
True Signal: fp=ATTCG pool=5
True Signal: fp=CGAAG pool=14
True Signal: fp=CACGG pool=9
True Signal: fp=AAGGG pool=13
True Signal: fp=GAGGC pool=11
True Signal: fp=GGCTT pool=11
```

```
True Signal: fp=AAACT pool=4
True Signal: fp=TCAAA pool=4
True Signal: fp=TCAAC pool=5
True Signal: fp=CAACT pool=4
True Signal: fp=AGAAT pool=10
True Signal: fp=AATTT pool=8
True Signal: fp=TACCC pool=5
True Signal: fp=ACGAT pool=1
True Signal: fp=CGAAT pool=12
True Signal: fp=TAAGG pool=1
True Signal: fp=AAGGT pool=9
True Signal: fp=AAGGT pool=12
True Signal: fp=GCTGA pool=12
True Signal: fp=TGCAG pool=5
True Signal: fp=TAGCG pool=5
True Signal: fp=GCGAT pool=14
True Signal: fp=GCTGC pool=10
True Signal: fp=GCTGG pool=1
True Signal: fp=GGTCG pool=0
True Signal: fp=TCAAT pool=4
True Signal: fp=TAAGT pool=2
True Signal: fp=CCTGT pool=5
True Signal: fp=TCTCG pool=12
True Signal: fp=TGTGA pool=9
True Signal: fp=GCTGT pool=2
True Signal: fp=GGTCT pool=13
True Signal: fp=CAATA pool=7
True Signal: fp=GAATA pool=0
True Signal: fp=GAATA pool=15
True Signal: fp=ATTTA pool=1
True Signal: fp=ATTTA pool=12
False positive Signal: fp=CAATT pool=6
False positive Signal: fp=AGAGT pool=4
False positive Signal: fp=TGCAC pool=15
False positive Signal: fp=CATCA pool=9
False positive Signal: fp=ACACG pool=1
False positive Signal: fp=GTTTG pool=5
False positive Signal: fp=CAGGT pool=12
False positive Signal: fp=TCACT pool=2
False positive Signal: fp=GGCAA pool=13
False positive Signal: fp=GCCTA pool=2
False positive Signal: fp=AGGAG pool=11
False positive Signal: fp=GGCCG pool=8
False positive Signal: fp=CTCGA pool=8
False positive Signal: fp=GGAGG pool=10
False positive Signal: fp=GACCT pool=7
False positive Signal: fp=CAGAG pool=14
False positive Signal: fp=ACTTC pool=11
False positive Signal: fp=AGACT pool=8
False positive Signal: fp=TGCTT pool=12
False positive Signal: fp=GGTCG pool=4
False positive Signal: fp=GATAC pool=8
```

```
False positive Signal: fp=AGGCG pool=4
False positive Signal: fp=TGCGG pool=3
False positive Signal: fp=GTCTC pool=7
False positive Signal: fp=ACCCA pool=10
False positive Signal: fp=ACATA pool=9
False positive Signal: fp=AAGGG pool=5
False positive Signal: fp=GCGAT pool=9
False positive Signal: fp=CTATT pool=11
False positive Signal: fp=TAGGT pool=8
False positive Signal: fp=GACCG pool=11
False positive Signal: fp=ACATT pool=1
False positive Signal: fp=GCTAC pool=2
False positive Signal: fp=ACAAT pool=7
False positive Signal: fp=AGGAC pool=7
False positive Signal: fp=GCCTC pool=13
False positive Signal: fp=CTAGT pool=9
False positive Signal: fp=AGTTA pool=8
False positive Signal: fp=ATAGA pool=14
False positive Signal: fp=ATTTC pool=10
False positive Signal: fp=CGATC pool=0
False positive Signal: fp=GCGTT pool=1
False positive Signal: fp=CGGAG pool=3
False positive Signal: fp=GTATG pool=8
False positive Signal: fp=TCGAA pool=4
False positive Signal: fp=ACATT pool=8
False positive Signal: fp=AAAAC pool=11
False positive Signal: fp=TGCGC pool=11
False positive Signal: fp=GCAAC pool=11
False positive Signal: fp=GGCAG pool=1
False positive Signal: fp=CGAGA pool=2
False positive Signal: fp=GTCAA pool=9
False positive Signal: fp=TCGAT pool=10
False positive Signal: fp=AGGAT pool=7
False positive Signal: fp=TCAGT pool=14
False positive Signal: fp=CGACG pool=14
False positive Signal: fp=GGAAG pool=11
False positive Signal: fp=GTCTG pool=6
False positive Signal: fp=TGCTC pool=13
False positive Signal: fp=TGCTC pool=15
False positive Signal: fp=CTAGC pool=13
False positive Signal: fp=GCCTT pool=1
False positive Signal: fp=CATAA pool=4
False positive Signal: fp=GCCAC pool=9
False positive Signal: fp=CAGCA pool=12
False positive Signal: fp=ATCGA pool=8
False positive Signal: fp=CAGCC pool=14
False positive Signal: fp=CGCGA pool=9
False positive Signal: fp=CAGCC pool=8
False positive Signal: fp=GGCTT pool=8
False positive Signal: fp=GGTCG pool=0
False positive Signal: fp=TATGA pool=14
False positive Signal: fp=CCCGC pool=10
```

```
False positive Signal: fp=AGCCG pool=0
False positive Signal: fp=CTAGC pool=10
False positive Signal: fp=AGTCT pool=1
False positive Signal: fp=GAGCT pool=7
False positive Signal: fp=ACCAA pool=10
False positive Signal: fp=GTCTT pool=3
False positive Signal: fp=GGGCG pool=5
False positive Signal: fp=GAGTT pool=1
False positive Signal: fp=AATGC pool=13
False positive Signal: fp=GAGGT pool=7
False positive Signal: fp=TACTA pool=3
False positive Signal: fp=TACTT pool=7
False positive Signal: fp=CTCCA pool=5
False positive Signal: fp=GATAA pool=0
False positive Signal: fp=TGTAT pool=0
False positive Signal: fp=GACCG pool=5
False positive Signal: fp=TCTAT pool=11
False positive Signal: fp=CTCTA pool=15
False positive Signal: fp=TAACG pool=14
False positive Signal: fp=TCTGC pool=6
False positive Signal: fp=CCTCA pool=15
False positive Signal: fp=GAGCT pool=2
False positive Signal: fp=CGGCT pool=0
False positive Signal: fp=GCCGA pool=9
False positive Signal: fp=TAAAC pool=7
False positive Signal: fp=TAGGT pool=8
False positive Signal: fp=GGGAT pool=12
False negative : fp= pool=
False negative : fp=CTCGA pool=7
False negative : fp=CTACG pool=1
False negative : fp=CTACG pool=2
False negative : fp=GTACC pool=0
False negative : fp=ATCGC pool=1
False negative : fp=GAATG pool=15
False negative : fp=ATCGG pool=13
False negative : fp=GTCGC pool=13
False negative : fp=ACCCA pool=14
False negative : fp=CTGGG pool=10
False negative : fp=CAATT pool=3
False negative : fp=GACAA pool=1
False negative : fp=TACTA pool=3
False negative : fp=ACCCC pool=6
10mers:23488
11mers:20478
12mers:15215
13mers:10346
14mers:7890
15mers:5945
16mers:5080
17mers:4433
18mers:4074
19mers:3825
```

20mers:3745 21mers:3700 22mers:3705 23mers:3680 24mers:3668 25mers:3676 26mers:3670 27mers:3688 28mers:3719 29mers:3742 30mers:3734 31mers:3767 32mers:3837 33mers:3855 34mers:3867 35mers:3953 36mers:3981 37mers:3995 38mers:4024 39mers:4041 40mers:4058 41mers:4039 42mers:4085 43mers:4135 44mers:4217 45mers:4386 46mers:4528 47mers:4608 48mers:4641 49mers:4644 50mers:4662 51mers:4705 52mers:4786 53mers:4845 54mers:4875 55mers:4899 56mers:4935 57mers:4925 58mers:4943 59mers:4993 60mers:5058 61mers:5142 62mers:5174 63mers:5221 64mers:5262 65mers:5295 66mers:5287 67mers:5312 68mers:5383 69mers:5483 70mers:5601

71mers:5707

72mers:5814 73mers:5885 74mers:5954 75mers:6047 76mers:6110 77mers:6127 78mers:6109 79mers:6137 80mers:6176 81mers:6186 82mers:6242 83mers:6311 84mers:6361 85mers:6382 86mers:6372 87mers:6417 88mers:6464 89mers:6507 90mers:6610 91mers:6646 92mers:6616 93mers:6595 94mers:6584 95mers:6631 96mers:6684 97mers:6771 98mers:6832 99mers:6829 100mers:6841 101mers:6887 102mers:6853 103mers:6867 104mers:6882 105mers:6897 106mers:6957 107mers:7050 108mers:7186 109mers:7307 110mers:7360 111mers:7470 112mers:7521 113mers:7502 114mers:7556 115mers:7560 116mers:7605 117mers:7619 118mers:7587 119mers:7614 120mers:7620 121mers:7630 122mers:7664

- 124mers:7592
- 125mers:7575
- 126mers:7532
- 127mers:7528
- 128mers:7487
- 129mers:7419
- 130mers:7372
- 131mers:7363
- 132mers:7396 133mers:7453
- 134mers:7442
- 135mers:7436
- 136mers:7425
- 137mers:7365
- 138mers:7383
- 139mers:7426
- 140mers:7429
- 141mers:7487
- 142mers:7491
- 143mers:7446
- 144mers:7414
- 145mers:7405
- 146mers:7429
- 147mers:7434
- 148mers:7497
- 149mers:7558
- 150mers:7550
- 151mers:5291
- 152mers:5258
- 153mers:5165
- 154mers:5051
- 155mers:4937
- 156mers:4850
- 157mers:4858
- 158mers:4844
- 159mers:4796
- 160mers:4755
- 161mers:4666
- 162mers:4602
- 163mers:4557 164mers:4509
- 165mers:4503 166mers:4487
- 167mers:4478
- 168mers:4466
- 169mers:4432
- 170mers:4407
- 171mers:4389
- 172mers:4342
- 173mers:4332 174mers:4266
- 175mers:4166

176mers:4115 177mers:4031 178mers:3959 179mers:3857 180mers:3758 181mers:3718 182mers:3685 183mers:3632 184mers:3575 185mers:3498 186mers:3454 187mers:3434 188mers:3427 189mers:3424 190mers:3396 191mers:3361 192mers:3340 193mers:3271 194mers:3218 195mers:3200 196mers:3130 197mers:3091 198mers:3067 199mers:3020 200mers:3013 201mers:3011 202mers:3032 203mers:3015 204mers:2876 205mers:2800 206mers:2757 207mers:2733 208mers:2740 209mers:2680 210mers:2610 211mers:2558 212mers:2511 213mers:2513 214mers:2473 215mers:2397 216mers:2317 217mers:2208 218mers:2143 219mers:2141 220mers:2118 221mers:2114 222mers:2144 223mers:2121 224mers:2104 225mers:2077 226mers:2077 227mers:2029

228mers:1924 229mers:1870 230mers:1823 231mers:1781 232mers:1772 233mers:1731 234mers:1625 235mers:1561 236mers:1515 237mers:1493 238mers:1442 239mers:1379 240mers:1323 241mers:1246 242mers:1195 243mers:1197 244mers:1160 245mers:1137 246mers:1127 247mers:1099 248mers:1095 249mers:1076 250mers:1046 251mers:991 252mers:944 253mers:916 254mers:901 255mers:881 256mers:877 257mers:862 258mers:818 259mers:789 260mers:771 261mers:754 262mers:728 263mers:698 264mers:663 265mers:610 266mers:566 267mers:555 268mers:521 269mers:474 270mers:418 271mers:367 272mers:343 273mers:326 274mers:316 275mers:294 276mers:263 277mers:236 278mers:219 279mers:214

280mers:218 281mers:220 282mers:218 283mers:209 284mers:199 285mers:194 286mers:196 287mers:187 288mers:174 289mers:161 290mers:139 291mers:123 292mers:114 293mers:101 294mers:79 295mers:58 296mers:47 297mers:37 298mers:27 299mers:18 300mers:11

SEQ ID NO:50

GGTAGGGGTAGACATCGCGTAAAAGGGGCGTACCCAGGACCCCCCTTGGCTCAATAAGTAGC GCTGGGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTCGCACGGGCTT ATTTAACGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAAT GCTGTGAGGCCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACTACGATTCCACTCGA CAATTTAGGATGTCTTCCCGAAAGCTATCGGGTAGAATATCAGATTCGTTTT

DotsOn=286

SEQ ID NO:51

GTAGGGGTAGACATCGCGTAAAAGGGGCGTACCCAGGACCCCCCTTGGCTCAATAAGTAGCG CTGGGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTCGCACGGGCTTA TTTAACGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAATG CTGTGAGGCCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACTACGATTCCACTCGAC AATTTAGGATGTCTTCCCGAAAGCTATCGGGTAGAATATCAGATTCGTTTTG

DotsOn=286

SEQ ID NO:52

GGGTAGGGGTAGACATCGCGTAAAAGGGGCCGTACCCAGGACCCCCCTTGGCTCAATAAGTAG CGCTGGGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTCGCACGGGCT TATTTAACGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCCGGCAGCCTGTCCAGTGAA TGCTGTGAGGCCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACTACGATTCCACTCG ACAATTTAGGATGTCTTCCCGAAAGCTATCGGGTAGAATATCAGATTCGTTT

DotsOn=285

SEQ ID NO:53

GGTAGGGGTAGACATCGCGTAAAAGGGGCGTACCCAGGACCCCCCTTGGCTCAATAAGTAGC GCTGGGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTCGCACGGGCTT ATTTAACGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAAT GCTGTGAGGCCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACTACGATTCCACTCGA CAATTTAGGATGTCTTCCCGAAAGCTATCGGGTAGAATATCAGATTCGTTTG

DotsOn=286

SEQ ID NO:54

GGGTAGGGGTAGACATCGCGTAAAAGGGGCGTACCCAGGACCCCCCTTGGCTCAATAAGTAG CGCTGGGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTCGCACGGGCT TATTTAACGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAA TGCTGTGAGGCCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACTACGATTCCACTCG ACAATTTAGGATGTCTTCCCGAAAGCTATCGGGTAGAATATCAGATTGTAGT

DotsOn=285

SEQ ID NO:55

GTAGGGGTAGACATCGCGTAAAAGGGGCGTACCCAGGACCCCCCTTGGCTCAATAAGTAGCG CTGGGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTCGCACGGGCTTA TTTAACGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCCGGCAGCCTGTCCAGTGAATG CTGTGAGGCCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACTACGATTCCACTCGAC AATTTAGGATGTCTTCCCGAAAGCTATCGGGTAGAATATCAGATTCGTTTAA

True solution DotsOn=286

SEO ID NO:56

GTAGGGGTAGACATCGCGTAAAAGGGGCGTACCCAGGACCCCCCTTGGCTCAATAAGTAGCG CTGGGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTCGCACGGGCTTA TTTAACGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAATG CTGTGAGGCCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACTACGATTCCACTCGAC AATTTAGGATGTCTTCCCGAAAGCTATCGGGTAGAATATCAGATTCCCATGT

DotsOn=284

SEQ ID NO:57

GGTAGGGGTAGACATCGCGTAAAAGGGGCGTACCCAGGACCCCCCTTGGCTCAATAAGTAGC GCTGGGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTCGCACGGGCTT ATTTAACGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAAT GCTGTGAGGCCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACTACGATTCCACTCGA CAATTTAGGATGTCTTCCCGAAAGCTATCGGGTAGAATATCAGATTCCCATG

DotsOn=285

SEQ ID NO:58

GGGTAGGGGTAGACATCGCGTAAAAGGGGCGTACCCAGGACCCCCCTTGGCTCAATAAGTAG CGCTGGGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTCGCACGGGCT TATTTAACGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAA TGCTGTGAGGCCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACTACGATTCCACTCG ACAATTTAGGATGTCTTCCCGAAAGCTATCGGGTAGAATATCAGATTCCCAT

DotsOn=285

SEQ ID NO:59

GGTAGGGGTAGACATCGCGTAAAAGGGGCCGTACCCAGGACCCCCCTTGGCTCAATAAGTAGC GCTGGGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTCGCACGGGCTT ATTTAACGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAAT GCTGTGAGGCCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACTACGATTCCACTCGA CAATTTAGGATGTCTTCCCGAAAGCTATCGGGTAGAATATCAGATTCGTTTA DotsOn=286

SEQ ID NO:60

GTAGGGGTAGACATCGCGTAAAAGGGGCGTACCCAGGACCCCCCTTGGCTCAATAAGTAGCG CTGGGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTCGCACGGGCTTA TTTAACGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAATG CTGTGAGGCCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACTACGATTCCACTCGAC AATTTAGGATGTCTTCCCGAAAGCTATCGGGTAGAATATCAGATTCGTTTGA

DotsOn=285

Solutions: 11

r300.0.0.DN16.out

Using pool DN16 Using sequence r300

```
True Signal: fp=CTCGA pool=7
True Signal: fp=CTACG pool=1
True Signal: fp=CTACG pool=2
True Signal: fp=GTACC pool=0
True Signal: fp=ATCGC pool=1
True Signal: fp=GAATG pool=15
True Signal: fp=ATCGG pool=13
True Signal: fp=GTCGC pool=13
True Signal: fp=ACCCA pool=14
True Signal: fp=CTGGG pool=10
True Signal: fp=CAATT pool=3
True Signal: fp=GACAA pool=1
True Signal: fp=TACTA pool=3
True Signal: fp=ACCCC pool=6
True Signal: fp=AGACA pool=10
True Signal: fp=TTCCA pool=8
True Signal: fp=TTCCA pool=4
True Signal: fp=ACGCA pool=8
True Signal: fp=GACAC pool=2
True Signal: fp=CGACA pool=10
True Signal: fp=CGACA pool=11
True Signal: fp=CTACT pool=10
True Signal: fp=CCCCC pool=2
True Signal: fp=CCCCC pool=14
True Signal: fp=TTCCC pool=12
True Signal: fp=GCCCA pool=1
True Signal: fp=GAGAA pool=8
True Signal: fp=CCAGC pool=5
True Signal: fp=CAGAG pool=3
True Signal: fp=GCAGA pool=1
True Signal: fp=GCAGC pool=12
True Signal: fp=CGCGA pool=3
True Signal: fp=AGCGC pool=0
True Signal: fp=GGACC pool=1
True Signal: fp=CCAGG pool=7
True Signal: fp=TTAGG pool=1
True Signal: fp=GAGAG pool=6
True Signal: fp=TAAAA pool=11
True Signal: fp=AGCGG pool=4
True Signal: fp=ACTAA pool=15
True Signal: fp=CGGGC pool=4
True Signal: fp=ACTAC pool=4
True Signal: fp=ACTAC pool=7
True Signal: fp=AGGGG pool=9
True Signal: fp=AGGGG pool=5
True Signal: fp=TTTAA pool=15
True Signal: fp=GGGGC pool=7
```

```
True Signal: fp=CAGAT pool=11
True Signal: fp=CATGA pool=14
True Signal: fp=AATGC pool=1
True Signal: fp=CCCCT pool=13
True Signal: fp=GACAT pool=4
True Signal: fp=TCTTC pool=8
True Signal: fp=CCAGT pool=10
True Signal: fp=CCAGT pool=9
True Signal: fp=GCTAC pool=9
True Signal: fp=TTTAG pool=11
True Signal: fp=TGAGA pool=12
True Signal: fp=TGCCG pool=8
True Signal: fp=GCGCT pool=15
True Signal: fp=CGCGT pool=4
True Signal: fp=TGAGG pool=5
True Signal: fp=TCGGG pool=1
True Signal: fp=CGGGT pool=8
True Signal: fp=CGGGT pool=12
True Signal: fp=GGCGT pool=12
True Signal: fp=TATCA pool=4
True Signal: fp=ATATC pool=9
True Signal: fp=CTATC pool=6
True Signal: fp=GGGGT pool=11
True Signal: fp=GGGGT pool=14
True Signal: fp=TATCG pool=3
True Signal: fp=GCTAT pool=3
True Signal: fp=GATGT pool=0
True Signal: fp=TGGCT pool=6
True Signal: fp=CTCAA pool=15
True Signal: fp=ATCAG pool=6
True Signal: fp=CGATA pool=2
True Signal: fp=CTGAC pool=5
True Signal: fp=GTATT pool=11
True Signal: fp=ATGAG pool=8
True Signal: fp=GCCTC pool=11
True Signal: fp=GTGAA pool=2
True Signal: fp=GCGTA pool=0
True Signal: fp=GCGTA pool=9
True Signal: fp=GCCTG pool=12
True Signal: fp=GGATG pool=1
True Signal: fp=GTGAG pool=0
True Signal: fp=TTAAC pool=6
True Signal: fp=AAAGC pool=1
True Signal: fp=AAAGC pool=6
True Signal: fp=AAGCC pool=8
True Signal: fp=CTCAT pool=8
True Signal: fp=AGATT pool=12
True Signal: fp=CAGCC pool=10
True Signal: fp=CGCAC pool=3
True Signal: fp=AAAGG pool=1
True Signal: fp=GACCC pool=9
True Signal: fp=CCCTT pool=1
```

```
True Signal: fp=CGATT pool=11
True Signal: fp=GAAGC pool=5
True Signal: fp=TCATG pool=1
True Signal: fp=AGGAC pool=6
True Signal: fp=TGCTA pool=4
True Signal: fp=GAAGG pool=10
True Signal: fp=AATAA pool=2
True Signal: fp=TGCTG pool=9
True Signal: fp=GGCAG pool=1
True Signal: fp=GAGCG pool=3
True Signal: fp=CTTGG pool=1
True Signal: fp=ACAAT pool=6
True Signal: fp=ACTCA pool=7
True Signal: fp=TCCAC pool=10
True Signal: fp=AATAG pool=13
True Signal: fp=GATAA pool=1
True Signal: fp=TACGA pool=6
True Signal: fp=TATTC pool=2
True Signal: fp=CCTCC pool=3
True Signal: fp=TAACG pool=14
True Signal: fp=AAGCT pool=12
True Signal: fp=AAGCT pool=5
True Signal: fp=ACTCG pool=15
True Signal: fp=CAGCT pool=9
True Signal: fp=TCCAG pool=8
True Signal: fp=CGCAT pool=11
True Signal: fp=TCGAC pool=9
True Signal: fp=TCGAC pool=5
True Signal: fp=GCTCA pool=5
True Signal: fp=AGGAT pool=8
True Signal: fp=TAGGA pool=15
True Signal: fp=AGTGA pool=14
True Signal: fp=TAGGC pool=13
True Signal: fp=TACGG pool=7
True Signal: fp=TAGGG pool=13
True Signal: fp=AATAT pool=13
True Signal: fp=GGTGC pool=1
True Signal: fp=GGTGC pool=5
True Signal: fp=TCCAT pool=9
True Signal: fp=TGAAT pool=10
True Signal: fp=TATTT pool=6
True Signal: fp=TGTCC pool=10
True Signal: fp=AACTA pool=1
True Signal: fp=AACTA pool=3
True Signal: fp=CACTC pool=7
True Signal: fp=CTCCA pool=6
True Signal: fp=AAGTA pool=7
True Signal: fp=CAGTA pool=8
True Signal: fp=GACTC pool=14
True Signal: fp=GTCCA pool=3
True Signal: fp=CTGCA pool=11
True Signal: fp=ATAGG pool=14
```

```
True Signal: fp=GTAGA pool=8
True Signal: fp=GTAGA pool=9
True Signal: fp=TGTCT pool=0
True Signal: fp=CAGTG pool=15
True Signal: fp=GTAGC pool=14
True Signal: fp=GTGCC pool=10
True Signal: fp=CAAAC pool=11
True Signal: fp=GTAGG pool=3
True Signal: fp=AAAAG pool=0
True Signal: fp=AAAAG pool=2
True Signal: fp=ACACG pool=5
True Signal: fp=GAAAG pool=14
True Signal: fp=CCCGA pool=15
True Signal: fp=AGCCC pool=10
True Signal: fp=AGAGA pool=13
True Signal: fp=ATGCT pool=6
True Signal: fp=AGAGC pool=14
True Signal: fp=GCTTA pool=9
True Signal: fp=AGGCC pool=12
True Signal: fp=CGGCA pool=10
True Signal: fp=GCCGA pool=7
True Signal: fp=CCTTG pool=2
True Signal: fp=GCTTC pool=5
True Signal: fp=TTCGC pool=10
True Signal: fp=GCACG pool=10
True Signal: fp=TTGGC pool=12
True Signal: fp=GTGCT pool=9
True Signal: fp=ACGGG pool=0
True Signal: fp=ACGGG pool=3
True Signal: fp=GCGGC pool=11
True Signal: fp=TAGAA pool=2
True Signal: fp=CCACT pool=13
True Signal: fp=GGGCG pool=2
True Signal: fp=TCAGA pool=9
True Signal: fp=CGTAA pool=12
True Signal: fp=TAGAC pool=11
True Signal: fp=CTTAT pool=13
True Signal: fp=AGCCT pool=0
True Signal: fp=CGTAC pool=7
True Signal: fp=CATCG pool=7
True Signal: fp=TCGCA pool=7
True Signal: fp=TCCCG pool=1
True Signal: fp=AGTAG pool=9
True Signal: fp=AGGCT pool=10
True Signal: fp=GGCCT pool=8
True Signal: fp=TCGCG pool=5
True Signal: fp=GGTAG pool=10
True Signal: fp=GGTAG pool=3
True Signal: fp=GGGCT pool=8
True Signal: fp=TGGGG pool=1
True Signal: fp=AGTAT pool=0
True Signal: fp=ATGTC pool=9
```

```
True Signal: fp=TGACT pool=9
True Signal: fp=CTGTC pool=11
True Signal: fp=GTCTC pool=4
True Signal: fp=CTGTG pool=3
True Signal: fp=CTAAA pool=14
True Signal: fp=ACATC pool=13
True Signal: fp=GTAAA pool=13
True Signal: fp=ATAAG pool=13
True Signal: fp=AGCTA pool=4
True Signal: fp=GTCTT pool=13
True Signal: fp=AGCTG pool=4
True Signal: fp=AGGTC pool=1
True Signal: fp=CGCTG pool=12
True Signal: fp=GGCTC pool=14
True Signal: fp=AGGTG pool=8
True Signal: fp=GGGTA pool=10
True Signal: fp=GGGTA pool=15
True Signal: fp=GGCTG pool=2
True Signal: fp=GGGTC pool=10
True Signal: fp=CGAAA pool=3
True Signal: fp=ATTCA pool=13
True Signal: fp=ATTCA pool=6
True Signal: fp=TTCAA pool=9
True Signal: fp=TTCAA pool=12
True Signal: fp=AACGA pool=11
True Signal: fp=ACGAA pool=13
True Signal: fp=ATTCC pool=2
True Signal: fp=CCGAA pool=12
True Signal: fp=CCGAA pool=14
True Signal: fp=CATTC pool=13
True Signal: fp=CCATT pool=11
True Signal: fp=GGGTG pool=6
True Signal: fp=AGAAG pool=0
True Signal: fp=CCCAG pool=3
True Signal: fp=CCCAG pool=5
True Signal: fp=CACGC pool=10
True Signal: fp=CTTCC pool=14
True Signal: fp=CTTCC pool=6
True Signal: fp=TTATT pool=0
True Signal: fp=GATTC pool=12
True Signal: fp=GATTC pool=14
True Signal: fp=CAGGA pool=6
True Signal: fp=GCATT pool=15
True Signal: fp=AGCTT pool=4
True Signal: fp=ATTCG pool=9
True Signal: fp=ATTCG pool=5
True Signal: fp=CGAAG pool=14
True Signal: fp=CACGG pool=9
True Signal: fp=AAGGG pool=13
True Signal: fp=GAGGC pool=11
True Signal: fp=GGCTT pool=11
True Signal: fp=AAACT pool=4
```

```
True Signal: fp=TCAAA pool=4
True Signal: fp=TCAAC pool=5
True Signal: fp=CAACT pool=4
True Signal: fp=AGAAT pool=10
True Signal: fp=AATTT pool=8
True Signal: fp=TACCC pool=5
True Signal: fp=ACGAT pool=1
True Signal: fp=CGAAT pool=6
True Signal: fp=TAAGG pool=1
True Signal: fp=AAGGT pool=9
True Signal: fp=AAGGT pool=12
True Signal: fp=GCTGA pool=12
True Signal: fp=TGCAG pool=5
True Signal: fp=TAGCG pool=5
True Signal: fp=GCGAT pool=14
True Signal: fp=GCTGC pool=10
True Signal: fp=GCTGG pool=1
True Signal: fp=GGTCG pool=0
True Signal: fp=TCAAT pool=4
True Signal: fp=TAAGT pool=2
True Signal: fp=CCTGT pool=5
True Signal: fp=TCTCG pool=12
True Signal: fp=TGTGA pool=9
True Signal: fp=GCTGT pool=2
True Signal: fp=GGTCT pool=13
True Signal: fp=CAATA pool=7
True Signal: fp=GAATA pool=0
True Signal: fp=GAATA pool=15
True Signal: fp=ATTTA pool=1
True Signal: fp=ATTTA pool=12
10mers:18240
11mers:2483
12mers:581
13mers:357
14mers:335
15mers:325
16mers:321
17mers:322
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23mers:310
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25mers:310
26mers:307
27mers:305
28mers:304
29mers:302
30mers:302
31mers:301
```

32mers:298 33mers:297 34mers:296 35mers:295 36mers:294 37mers:293 38mers:292 39mers:292 40mers:291 41mers:290 42mers:289 43mers:288 44mers:287 45mers:288 46mers:285 47mers:283 48mers:282 49mers:281 50mers:281 51mers:279 52mers:278 53mers:277 54mers:276 55mers:275 56mers:275 57mers:275 58mers:273 59mers:271 60mers:271 61mers:271 62mers:271 63mers:268 64mers:267 65mers:268 66mers:265 67mers:264 68mers:262 69mers:261 70mers:260 71mers:259 72mers:258 73mers:257 74mers:254 75mers:253 76mers:252 77mers:252 78mers:250 79mers:250 80mers:249 81mers:247 82mers:246 83mers:245

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- 135mers:187

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- 281mers:25
- 282mers:24
- 283mers:24
- 284mers:23
- 285mers:22
- 286mers:19
- 287mers:17
- 288mers:16
- 289mers:15
- 290mers:15
- 291mers:13

292mers:11 293mers:9 294mers:8 295mers:7 296mers:6 297mers:5 298mers:4 299mers:3

SEQ ID NO:61

GTAGGGGTAG ACATCGCGTA AAAGGGGCGT ACCCAGGACC CCCCTTGGCT CAATAAGTAG CGCTGGGGTG CTACTACGGG TCTCGACACG CATTCAACTA AAAGCTTCCA TTCGCACGGG CTTATTTAAC GAAGGTCGCG ATAAGGTGCC GAATAGGCTG CAGAGCGGCA GCCTGTCCAG TGAATGCTGT GAGGCCTCCA GCTGACTAT GAGAGAAGCC CAGTATTCAA ACTACGATTC CACTCGACAA TTTAGGATGT CTTCCCGAAA GCTATCGGGT AGAATATCAG ATTCGTTTAA

True solution DotsOn=285

Solutions: 1

r300.100.15.DN16.out

Using pool DN16 Using sequence r300

```
True Signal: fp=CTCGA pool=7
True Signal: fp=CTACG pool=1
True Signal: fp=CTACG pool=2
True Signal: fp=GTACC pool=0
True Signal: fp=ATCGC pool=1
True Signal: fp=GAATG pool=15
True Signal: fp=ATCGG pool=13
True Signal: fp=GTCGC pool=13
True Signal: fp=ACCCA pool=14
True Signal: fp=CTGGG pool=10
True Signal: fp=CAATT pool=3
True Signal: fp=GACAA pool=1
True Signal: fp=TACTA pool=3
True Signal: fp=ACCCC pool=6
True Signal: fp=AGACA pool=10
True Signal: fp=TTCCA pool=8
True Signal: fp=TTCCA pool=4
True Signal: fp=ACGCA pool=8
True Signal: fp=GACAC pool=2
True Signal: fp=CGACA pool=10
True Signal: fp=CGACA pool=11
True Signal: fp=CTACT pool=10
True Signal: fp=CCCCC pool=2
True Signal: fp=CCCCC pool=14
True Signal: fp=TTCCC pool=12
True Signal: fp=GCCCA pool=1
True Signal: fp=GAGAA pool=8
True Signal: fp=CCAGC pool=5
True Signal: fp=CAGAG pool=3
True Signal: fp=GCAGA pool=1
True Signal: fp=GCAGC pool=12
True Signal: fp=CGCGA pool=3
True Signal: fp=AGCGC pool=0
True Signal: fp=GGACC pool=1
True Signal: fp=CCAGG pool=7
True Signal: fp=TTAGG pool=1
True Signal: fp=GAGAG pool=6
True Signal: fp=TAAAA pool=11
True Signal: fp=AGCGG pool=4
True Signal: fp=ACTAA pool=15
True Signal: fp=CGGGC pool=4
True Signal: fp=ACTAC pool=4
True Signal: fp=ACTAC pool=7
True Signal: fp=AGGGG pool=9
True Signal: fp=AGGGG pool=5
True Signal: fp=TTTAA pool=15
True Signal: fp=GGGGC pool=7
```

```
True Signal: fp=CAGAT pool=11
True Signal: fp=CATGA pool=14
True Signal: fp=AATGC pool=1
True Signal: fp=CCCCT pool=13
True Signal: fp=GACAT pool=4
True Signal: fp=TCTTC pool=8
True Signal: fp=CCAGT pool=10
True Signal: fp=CCAGT pool=9
True Signal: fp=GCTAC pool=9
True Signal: fp=TTTAG pool=11
True Signal: fp=TGAGA pool=12
True Signal: fp=TGCCG pool=8
True Signal: fp=GCGCT pool=15
True Signal: fp=CGCGT pool=4
True Signal: fp=TGAGG pool=5
True Signal: fp=TCGGG pool=1
True Signal: fp=CGGGT pool=8
True Signal: fp=CGGGT pool=12
True Signal: fp=GGCGT pool=12
True Signal: fp=TATCA pool=4
True Signal: fp=ATATC pool=9
True Signal: fp=CTATC pool=6
True Signal: fp=GGGGT pool=11
True Signal: fp=GGGGT pool=14
True Signal: fp=TATCG pool=3
True Signal: fp=GCTAT pool=3
True Signal: fp=GATGT pool=0
True Signal: fp=TGGCT pool=6
True Signal: fp=CTCAA pool=15
True Signal: fp=ATCAG pool=6
True Signal: fp=CGATA pool=2
True Signal: fp=CTGAC pool=5
True Signal: fp=GTATT pool=11
True Signal: fp=ATGAG pool=8
True Signal: fp=GCCTC pool=11
True Signal: fp=GTGAA pool=2
True Signal: fp=GCGTA pool=0
True Signal: fp=GCGTA pool=9
True Signal: fp=GCCTG pool=12
True Signal: fp=GGATG pool=1
True Signal: fp=GTGAG pool=0
True Signal: fp=TTAAC pool=6
True Signal: fp=AAAGC pool=1
True Signal: fp=AAAGC pool=6
True Signal: fp=AAGCC pool=8
True Signal: fp=CTCAT pool=8
True Signal: fp=AGATT pool=12
True Signal: fp=CAGCC pool=10
True Signal: fp=CGCAC pool=3
True Signal: fp=AAAGG pool=1
True Signal: fp=GACCC pool=9
True Signal: fp=CCCTT pool=1
```

```
True Signal: fp=CGATT pool=11
True Signal: fp=GAAGC pool=5
True Signal: fp=TCATG pool=1
True Signal: fp=AGGAC pool=6
True Signal: fp=TGCTA pool=4
True Signal: fp=GAAGG pool=10
True Signal: fp=AATAA pool=2
True Signal: fp=TGCTG pool=9
True Signal: fp=GGCAG pool=1
True Signal: fp=GAGCG pool=3
True Signal: fp=CTTGG pool=1
True Signal: fp=ACAAT pool=6
True Signal: fp=ACTCA pool=7
True Signal: fp=TCCAC pool=10
True Signal: fp=AATAG pool=13
True Signal: fp=GATAA pool=1
True Signal: fp=TACGA pool=6
True Signal: fp=TATTC pool=2
True Signal: fp=CCTCC pool=3
True Signal: fp=TAACG pool=14
True Signal: fp=AAGCT pool=12
True Signal: fp=AAGCT pool=5
True Signal: fp=ACTCG pool=15
True Signal: fp=CAGCT pool=9
True Signal: fp=TCCAG pool=8
True Signal: fp=CGCAT pool=11
True Signal: fp=TCGAC pool=9
True Signal: fp=TCGAC pool=5
True Signal: fp=GCTCA pool=5
True Signal: fp=AGGAT pool=8
True Signal: fp=TAGGA pool=15
True Signal: fp=AGTGA pool=14
True Signal: fp=TAGGC pool=13
True Signal: fp=TACGG pool=7
True Signal: fp=TAGGG pool=13
True Signal: fp=AATAT pool=13
True Signal: fp=GGTGC pool=1
True Signal: fp=GGTGC pool=5
True Signal: fp=TCCAT pool=9
True Signal: fp=TGAAT pool=10
True Signal: fp=TATTT pool=6
True Signal: fp=TGTCC pool=10
True Signal: fp=AACTA pool=1
True Signal: fp=AACTA pool=3
True Signal: fp=CACTC pool=7
True Signal: fp=CTCCA pool=6
True Signal: fp=AAGTA pool=7
True Signal: fp=CAGTA pool=8
True Signal: fp=GACTC pool=14
True Signal: fp=GTCCA pool=3
True Signal: fp=CTGCA pool=11
True Signal: fp=ATAGG pool=14
```

```
True Signal: fp=GTAGA pool=8
True Signal: fp=GTAGA pool=9
True Signal: fp=TGTCT pool=0
True Signal: fp=CAGTG pool=15
True Signal: fp=GTAGC pool=14
True Signal: fp=GTGCC pool=10
True Signal: fp=CAAAC pool=11
True Signal: fp=GTAGG pool=3
True Signal: fp=AAAAG pool=0
True Signal: fp=AAAAG pool=2
True Signal: fp=ACACG pool=5
True Signal: fp=GAAAG pool=14
True Signal: fp=CCCGA pool=15
True Signal: fp=AGCCC pool=10
True Signal: fp=AGAGA pool=13
True Signal: fp=ATGCT pool=6
True Signal: fp=AGAGC pool=14
True Signal: fp=GCTTA pool=9
True Signal: fp=AGGCC pool=12
True Signal: fp=CGGCA pool=10
True Signal: fp=GCCGA pool=7
True Signal: fp=CCTTG pool=2
True Signal: fp=GCTTC pool=5
True Signal: fp=TTCGC pool=10
True Signal: fp=GCACG pool=10
True Signal: fp=TTGGC pool=12
True Signal: fp=GTGCT pool=9
True Signal: fp=ACGGG pool=0
True Signal: fp=ACGGG pool=3
True Signal: fp=GCGGC pool=11
True Signal: fp=TAGAA pool=2
True Signal: fp=CCACT pool=13
True Signal: fp=GGGCG pool=2
True Signal: fp=TCAGA pool=9
True Signal: fp=CGTAA pool=12
True Signal: fp=TAGAC pool=11
True Signal: fp=CTTAT pool=13
True Signal: fp=AGCCT pool=0
True Signal: fp=CGTAC pool=7
True Signal: fp=CATCG pool=7
True Signal: fp=TCGCA pool=7
True Signal: fp=TCCCG pool=1
True Signal: fp=AGTAG pool=9
True Signal: fp=AGGCT pool=10
True Signal: fp=GGCCT pool=8
True Signal: fp=TCGCG pool=5
True Signal: fp=GGTAG pool=10
True Signal: fp=GGTAG pool=3
True Signal: fp=GGGCT pool=8
True Signal: fp=TGGGG pool=1
True Signal: fp=AGTAT pool=0
True Signal: fp=ATGTC pool=9
```

```
True Signal: fp=TGACT pool=9
True Signal: fp=CTGTC pool=11
True Signal: fp=GTCTC pool=4
True Signal: fp=CTGTG pool=3
True Signal: fp=CTAAA pool=14
True Signal: fp=ACATC pool=13
True Signal: fp=GTAAA pool=13
True Signal: fp=ATAAG pool=13
True Signal: fp=AGCTA pool=4
True Signal: fp=GTCTT pool=13
True Signal: fp=AGCTG pool=4
True Signal: fp=AGGTC pool=1
True Signal: fp=CGCTG pool=12
True Signal: fp=GGCTC pool=14
True Signal: fp=AGGTG pool=8
True Signal: fp=GGGTA pool=10
True Signal: fp=GGGTA pool=15
True Signal: fp=GGCTG pool=2
True Signal: fp=GGGTC pool=10
True Signal: fp=CGAAA pool=3
True Signal: fp=ATTCA pool=13
True Signal: fp=ATTCA pool=6
True Signal: fp=TTCAA pool=9
True Signal: fp=TTCAA pool=12
True Signal: fp=AACGA pool=11
True Signal: fp=ACGAA pool=13
True Signal: fp=ATTCC pool=2
True Signal: fp=CCGAA pool=12
True Signal: fp=CCGAA pool=14
True Signal: fp=CATTC pool=13
True Signal: fp=CCATT pool=11
True Signal: fp=GGGTG pool=6
True Signal: fp=AGAAG pool=0
True Signal: fp=CCCAG pool=3
True Signal: fp=CCCAG pool=5
True Signal: fp=CACGC pool=10
True Signal: fp=CTTCC pool=14
True Signal: fp=CTTCC pool=6
True Signal: fp=TTATT pool=0
True Signal: fp=GATTC pool=12
True Signal: fp=GATTC pool=14
True Signal: fp=CAGGA pool=6
True Signal: fp=GCATT pool=15
True Signal: fp=AGCTT pool=4
True Signal: fp=ATTCG pool=9
True Signal: fp=ATTCG pool=5
True Signal: fp=CGAAG pool=14
True Signal: fp=CACGG pool=9
True Signal: fp=AAGGG pool=13
True Signal: fp=GAGGC pool=11
True Signal: fp=GGCTT pool=11
True Signal: fp=AAACT pool=4
```

```
True Signal: fp=TCAAA pool=4
True Signal: fp=TCAAC pool=5
True Signal: fp=CAACT pool=4
True Signal: fp=AGAAT pool=10
True Signal: fp=AATTT pool=8
True Signal: fp=TACCC pool=5
True Signal: fp=ACGAT pool=1
True Signal: fp=CGAAT pool=6
True Signal: fp=TAAGG pool=1
True Signal: fp=AAGGT pool=9
True Signal: fp=AAGGT pool=12
True Signal: fp=GCTGA pool=12
True Signal: fp=TGCAG pool=5
True Signal: fp=TAGCG pool=5
True Signal: fp=GCGAT pool=14
True Signal: fp=GCTGC pool=10
True Signal: fp=GCTGG pool=1
True Signal: fp=GGTCG pool=0
True Signal: fp=TCAAT pool=4
True Signal: fp=TAAGT pool=2
True Signal: fp=CCTGT pool=5
True Signal: fp=TCTCG pool≈12
True Signal: fp=TGTGA pool=9
True Signal: fp=GCTGT pool=2
True Signal: fp=GGTCT pool=13
True Signal: fp=CAATA pool=7
True Signal: fp=GAATA pool=0
True Signal: fp=GAATA pool=15
True Signal: fp=ATTTA pool=1
True Signal: fp=ATTTA pool=12
False positive Signal: fp=AGACT pool=2
False positive Signal: fp=AACTG pool=12
False positive Signal: fp=CCACA pool=11
False positive Signal: fp=GCCGC pool=7
False positive Signal: fp=CATAC pool=2
False positive Signal: fp=GTGTA pool=0
False positive Signal: fp=AAGAG pool=9
False positive Signal: fp=GATGT pool=7
False positive Signal: fp=CAAGC pool=6
False positive Signal: fp=GGGAC pool=3
False positive Signal: fp=ATTTC pool=9
False positive Signal: fp=GATTA pool=1
False positive Signal: fp=TCCCT pool=10
False positive Signal: fp=GGTAC pool=11
False positive Signal: fp=GCAGC pool=9
False positive Signal: fp=CCGCT pool=4
False positive Signal: fp=CATTT pool=3
False positive Signal: fp=ACTGA pool=15
False positive Signal: fp=AGAGC pool=2
False positive Signal: fp=GTCCA pool=10
False positive Signal: fp=TGAGA pool=2
False positive Signal: fp=GAATC pool=10
```

```
False positive Signal: fp=ATCTC pool=1
False positive Signal: fp=CACCC pool=5
False positive Signal: fp=CTGGT pool=10
False positive Signal: fp=CGGCT pool=7
False positive Signal: fp=CAAGT pool=3
False positive Signal: fp=TAGAT pool=2
False positive Signal: fp=AGGCG pool=2
False positive Signal: fp=GTCTA pool=11
False positive Signal: fp=CAATA pool=1
False positive Signal: fp=GTAGG pool=8
False positive Signal: fp=GTGAC pool=2
False positive Signal: fp=GATGC pool=4
False positive Signal: fp=GACGC pool=2
False positive Signal: fp=AGCCA pool=12
False positive Signal: fp=GCAGC pool=7
False positive Signal: fp=GGTGA pool=7
False positive Signal: fp=TATCT pool=6
False positive Signal: fp=CATAT pool=15
False positive Signal: fp=AGATC pool=7
False positive Signal: fp=TATAG pool=14
False positive Signal: fp=TCAAA pool=0
False positive Signal: fp=ACTCA pool=10
False positive Signal: fp=GACAA pool=3
False positive Signal: fp=GTCTA pool=9
False positive Signal: fp=ACTCC pool=1
False positive Signal: fp=CGGAG pool=6
False positive Signal: fp=CCTAA pool=8
False positive Signal: fp=GTCCG pool=13
False positive Signal: fp=CGACA pool=15
False positive Signal: fp=CCTGA pool=10
False positive Signal: fp=CCATT pool=9
False positive Signal: fp=ACTAT pool=4
False positive Signal: fp=AACCG pool=9
False positive Signal: fp=CGATC pool=11
False positive Signal: fp=TGGAG pool=3
False positive Signal: fp=AGCCC pool=0
False positive Signal: fp=ATCTC pool=10
False positive Signal: fp=CATTA pool=6
False positive Signal: fp=GCTGG pool=12
False positive Signal: fp=GTGCA pool=13
False positive Signal: fp=CACTC pool=10
False positive Signal: fp=AACAT pool=14
False positive Signal: fp=GCCAC pool=7
False positive Signal: fp=AAGAC pool=3
False positive Signal: fp=CGTGG pool=12
False positive Signal: fp=CGTTT pool=0
False positive Signal: fp=CTCGC pool=13
False positive Signal: fp=GGAAA pool=9
False positive Signal: fp=GGTCC pool=15
False positive Signal: fp=TCTGA pool=15
False positive Signal: fp=TCAAC pool=15
False positive Signal: fp=AAGCA pool=9
```

```
False positive Signal: fp=GGAAG pool=1
False positive Signal: fp=GTGGG pool=1
False positive Signal: fp=TAAGC pool=9
False positive Signal: fp=TGGGA pool=10
False positive Signal: fp=GTTTA pool=2
False positive Signal: fp=GGGCG pool=12
False positive Signal: fp=ACAGG pool=0
False positive Signal: fp=ACATC pool=9
False positive Signal: fp=CAATG pool=3
False positive Signal: fp=AAAGC pool=9
False positive Signal: fp=GGAAC pool=5
False positive Signal: fp=GGGGA pool=0
False positive Signal: fp=CTGGT pool=13
False positive Signal: fp=GGGTA pool=15
False positive Signal: fp=ATCTC pool=9
False positive Signal: fp=GTCAC pool=15
False positive Signal: fp=AAGTT pool=7
False positive Signal: fp=CCATG pool=8
False positive Signal: fp=TAAGG pool=15
False positive Signal: fp=AAAGC pool=6
False positive Signal: fp=CCGGT pool=3
False positive Signal: fp=ACAAA pool=13
False positive Signal: fp=TCTTT pool=14
False positive Signal: fp=CTGTA pool=6
False positive Signal: fp=CAGTG pool=15
False positive Signal: fp=CCCAG pool=0
False negative : fp= pool=
False negative : fp=CTCGA pool=7
False negative : fp=CTACG pool=1
False negative : fp=CTACG pool=2
False negative : fp=GTACC pool=0
False negative : fp=ATCGC pool=1
False negative : fp=GAATG pool=15
False negative : fp=ATCGG pool=13
False negative : fp=GTCGC pool=13
False negative : fp=ACCCA pool=14
False negative : fp=CTGGG pool=10
False negative : fp=CAATT pool=3
False negative : fp=GACAA pool=1
False negative : fp=TACTA pool=3
False negative : fp=ACCCC pool=6
10mers:23552
11mers:20332
12mers:15187
13mers:10500
14mers:8165
15mers:6357
16mers:5426
17mers:4711
18mers:4327
19mers:4105
20mers:4006
```

21mers:3949 22mers:3895 · 23mers:3800 24mers:3721 25mers:3650 26mers:3611 27mers:3627 28mers:3613 29mers:3613 30mers:3605 31mers:3596 32mers:3619 33mers:3656 34mers:3673 35mers:3700 36mers:3714 37mers:3768 38mers:3822 39mers:3838 40mers:3845 41mers:3856 42mers:3920 43mers:3982 44mers:4015 45mers:4080 46mers:4132 47mers:4109 48mers:4126 49mers:4098 50mers:4084 51mers:4096 52mers:4131 53mers:4180 54mers:4257 55mers:4320 56mers:4384 57mers:4486 58mers:4532 59mers:4565 60mers:4567 61mers:4624 62mers:4729 63mers:4873 64mers:4994 65mers:5081 66mers:5141 67mers:5169 68mers:5191 69mers:5220 70mers:5299 71mers:5427

73mers:5648 74mers:5674 75mers:5691 76mers:5716 77mers:5777 78mers:5833 79mers:5865 80mers:5893 81mers:5968 82mers:6075 83mers:6198 84mers:6331 85mers:6394 86mers:6470 87mers:6535 88mers:6606 89mers:6668 90mers:6721 91mers:6778 92mers:6842 93mers:6891 94mers:6895 95mers:6881 96mers:6901 97mers:6920 98mers:6925 99mers:6908 100mers:6883 101mers:4871 102mers:4792 103mers:4761 104mers:4729 105mers:4714 106mers:4751 107mers:4810 108mers:4879 109mers:4878 110mers:4811 111mers:4738 112mers:4684 113mers:4614 114mers:4555 115mers:4502 116mers:4475 117mers:4448 118mers:4402 119mers:4399 120mers:4435 121mers:4439 122mers:4449 123mers:4453

125mers:4380 126mers:4363 127mers:4304 128mers:4243 129mers:4166 130mers:4087 131mers:4068 132mers:4041 133mers:4003 134mers:3959 135mers:3906 136mers:3859 137mers:3802 138mers:3743 139mers:3713 140mers:3616 141mers:3577 142mers:3589 143mers:3572 144mers:3618 145mers:3668 146mers:3697 147mers:3670 148mers:3639 149mers:3580 150mers:3503 151mers:3431 152mers:3384 153mers:3359 154mers:3330 155mers:3321 156mers:3288 157mers:3313 158mers:3325 159mers:3313 160mers:3273 161mers:3251 162mers:3212 163mers:3196 164mers:3185 165mers:3179 166mers:3182 167mers:3129 168mers:3091 169mers:3048 170mers:3080 171mers:3069 172mers:3061 173mers:3036 174mers:3012 175mers:2970

177mers:2912 178mers:2891 179mers:2925 180mers:2945 181mers:2992 182mers:3019 183mers:3002 184mers:2973 185mers:2965 186mers:2973 187mers:2981 188mers:2955 189mers:2899 190mers:2836 191mers:2756 192mers:2707 193mers:2673 194mers:2646 195mers:2628 196mers:2618 197mers:2591 198mers:2580 199mers:2596 200mers:2623 201mers:2623 202mers:2595 203mers:2583 204mers:2529 205mers:2505 206mers:2524 207mers:2527 208mers:2555 209mers:2523 210mers:2487 211mers:2431 212mers:2364 213mers:2307 214mers:2263 215mers:2227 216mers:2168 217mers:2123 218mers:2077 219mers:2065 220mers:2035 221mers:2020 222mers:2034 223mers:2038 224mers:2026 225mers:2000 226mers:1975 227mers:1943 228mers:1879

229mers:1808 230mers:1771 231mers:1720 232mers:1687 233mers:1620 234mers:1548 235mers:1492 236mers:1453 237mers:1405 238mers:1381 239mers:1338 240mers:1272 241mers:1222 242mers:1190 243mers:1171 244mers:1129 245mers:1104 246mers:1095 247mers:1066 248mers:1021 249mers:996 250mers:939 251mers:896 252mers:850 253mers:795 254mers:742 255mers:679 256mers:649 257mers:631 258mers:613 259mers:602 260mers:605 261mers:600 262mers:585 263mers:568 264mers:540 265mers:509 266mers:487 267mers:472 268mers:451 269mers:418 270mers:395 271mers:365 272mers:337 273mers:319 274mers:285 275mers:266 276mers:246 277mers:223 278mers:203 279mers:194

281mers:173 282mers:173 283mers:161 284mers:145 285mers:136 286mers:135 287mers:130 288mers:123 289mers:121 290mers:105 291mers:91 292mers:84 293mers:66 294mers:53 295mers:41 296mers:31 297mers:26 298mers:21 299mers:16 300mers:10

SEQ ID NO:62

GTAGGGGTAGACATCGCGTAAAAGGGGCGTACCCAGGACCCCCCTTGGCTCAATAAGTAGCG CTGGGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTCGCACGGGCTTA TTTAACGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAATG CTGTGAGGCCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACTACGATTCCACTCGAC AATTTAGGATGTCTTCCCGAAAGCTATCGGGTAGAATATCAGATTCGTTTAA

True solution DotsOn=285

SEQ ID NO:63

GTAGGGGTAGACATCGCGTAAAAGGGGCGTACCCAGGACCCCCCTTGGCTCAATAAGTAGCG CTGGGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTCGCACGGGCTTA TTTAACGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAATG CTGTGAGGCCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACTACGATTCCACTCGAC AATTTAGGATGTCTTCCCGAAAGCTATCGGGTAGAATATCAGATTCCCATGT

DotsOn=283

SEO ID NO:64

GGTAGGGGTAGACATCGCGTAAAAGGGGCGTACCCAGGACCCCCCTTGGCTCAATAAGTAGC GCTGGGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTCGCACGGGCTT ATTTAACGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAAT GCTGTGAGGCCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACTACGATTCCACTCGA CAATTTAGGATGTCTTCCCGAAAGCTATCGGGTAGAATATCAGATTCGTTTT

DotsOn=285

SEO ID NO:65

DotsOn=285

SEO ID NO:66

GGTAGGGGTAGACATCGCGTAAAAGGGGCGTACCCAGGACCCCCCTTGGCTCAATAAGTAGC GCTGGGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTCGCACGGGCTT ATTTAACGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAAT GCTGTGAGGCCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACTACGATTCCACTCGA CAATTTAGGATGTCTTCCCGAAAGCTATCGGGTAGAATATCAGATTCCCATG

DotsOn=284

SEO ID NO:67

GGGTAGGGGTAGACATCGCGTAAAAGGGGCGTACCCAGGACCCCCCTTGGCTCAATAAGTAG CGCTGGGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTCGCACGGGCT TATTTAACGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAA TGCTGTGAGGCCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACTACGATTCCACTCG ACAATTTAGGATGTCTTCCCGAAAGCTATCGGGTAGAATATCAGATTCGTTT

DotsOn=284

SEQ ID NO:68

GGTAGGGGTAGACATCGCGTAAAAGGGGCGTACCCAGGACCCCCCTTGGCTCAATAAGTAGC GCTGGGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTCGCACGGGCTT ATTTAACGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAAT GCTGTGAGGCCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACTACGATTCCACTCGA CAATTTAGGATGTCTTCCCGAAAGCTATCGGGTAGAATATCAGATTCGTTTG

DotsOn=285

SEQ ID NO:69

GGGTAGGGGTAGACATCGCGTAAAAGGGGCGTACCCAGGACCCCCCTTGGCTCAATAAGTAGCTGGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTCGCACGGGCTTATTTAACGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAATGCTGTGAGGCCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACTACGATTCCACTCGACAATTTAGGATGTCTTCCCGAAAGCTATCGGGTAGAATATCAGATTCCCAT

DotsOn=284

SEO ID NO:70

GGTAGGGGTAGACATCGCGTAAAAGGGGCGTACCCAGGACCCCCCTTGGCTCAATAAGTAGC GCTGGGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTCGCACGGGCTT ATTTAACGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAAT GCTGTGAGGCCTCCAGCTGACTCATGAGAGAAGCCCAGTATTCAAACTACGATTCCACTCGA CAATTTAGGATGTCTTCCCGAAAGCTATCGGGTAGAATATCAGATTCGTTTA

DotsOn=285

SEQ ID NO:71

GTAGGGGTAGACATCGCGTAAAAGGGGCCGTACCCAGGACCCCCCTTGGCTCAATAAGTAGCG CTGGGGTGCTACTACGGGTCTCGACACGCATTCAACTAAAAGCTTCCATTCGCACGGGCTTA TTTAACGAAGGTCGCGATAAGGTGCCGAATAGGCTGCAGAGCGGCAGCCTGTCCAGTGAATG $\label{thm:ctgrade} {\tt CTGTGAGGCCTCCAGCTGACTCATGAGAGAGCCCAGTATTCAAACTACGATTCCACTCGACAATTTAGGATGTCTTCCCGAAAGCTATCGGGTAGAATATCAGATTCGTTTGA\\ {\tt DotsOn=284}$

Solutions: 10